



## Horry County Safety Policy

Horry County's objective is to conduct all operations as safely and efficiently as possible. The County Administrator and all Assistant County Administrators recognize that the prevention of accidental losses affecting employees, property, and the public will enhance the operating efficiency of County Government.


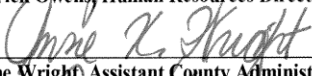
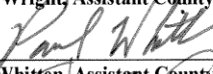
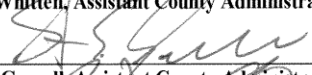

Furthermore, a pro-active loss control posture requires that sound loss prevention measures are of primary consideration and take priority over expediency in all operations.

Also, the County will endeavor to provide a work environment as free from hazard as possible through the establishment and implementation of loss control policies and procedures, and their subsequent modifications, improvements and additions as needed that are designed to provide the optimum in protection to County employees, members of the public, and public and private property.

Therefore, the County will support compliance with all Federal and State safety regulations; provide and require as needed the use of personal protective equipment by all employees; and insure that all employees are advised of and understand their loss prevention responsibilities in the performance of their work.

Be it further resolved that we are adopting the Horry County Safety Policy 2012 with effective date of November 1, 2012, and future modifications may be approved by the County Administrator.

Signed, sealed and adopted by:

 _____ Patrick Owens, Human Resources Director	<u>8/29/12</u> _____ Date
 _____ Anne Wright, Assistant County Administrator	<u>10/2/12</u> _____ Date
 _____ Paul Whitten, Assistant County Administrator	<u>10-19-12</u> _____ Date
 _____ Steve Gosnell, Assistant County Administrator/County Engineer	<u>10/16/12</u> _____ Date
 _____ Chris Eldridge, County Administrator	<u>10/22/12</u> _____ Date

# Horry County

# Safety Policy

Horry County, S.C.

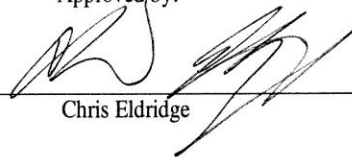
August 2012

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Approved by:

County Administrator:



Chris Eldridge

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# POLICY

Horry County Government is firmly committed to providing each of its employees a safe and healthy work environment. Safety training, implementation, and adherence are a matter of County policy, as well as state and federal laws. Horry County Government has implemented this Safety Policy as outlined herein.

**PURPOSE:** Federal and State regulations require the establishment and continual enforcement of safety training programs. Employers are required to conform to standards as stated in Occupational Safety and Health Administration and other state and federal regulations. These policies outline responsibilities of employees at all levels, and spell out how requirements are to be accomplished when a written program is required.

**APPLICABILITY:** This policy applies to all employees of Horry County Government. Adherence to this policy and all state and federal regulations is a condition of employment for all employees. Employees that fail to meet these requirements may be retrained, disciplined, or terminated as necessary. Maintaining a safe work environment is not optional.

**REFERENCE:** This policy and all Standard Operating Procedures have been derived directly from South Carolina Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

## **RESPONSIBILITIES:**

### **COUNTY COUNCIL:**

The Horry County Council supports a countywide safety program through budgetary considerations.

### **COUNTY ADMINISTRATOR**

The County Administrator, through the Risk Management staff, is responsible for overall management and administration of the Safety Program.

### **ASSISTANT ADMINISTRATORS**

Assistant Administrator's are responsible for providing oversight and guidance in matters pertaining to safety for assigned departments. Assistant Administrator's are responsible for:

- Ensuring departments are in compliance with, county, state, and federal safety policies and regulations.
- Ensuring departments budget for required safety items and programs.
- Ensuring department heads are providing consistent disciplinary actions in order to promote adequate safety.
- Addressing safety concerns of departments.
- Ensuring departments complete reports requested by Risk Management.
- Hold supervisors accountable for injuries incurred under their supervision.

## **RISK MANAGER**

The Risk Manager is responsible for overseeing all aspects of the safety program and ensuring consistency with the County's mission “to provide quality, responsive service and maintain a clean, safe and well-planned environment for the enjoyment and benefit of our residents, visitors and businesses” as well as our employees. The Risk Manager is responsible for:

- Managing the risk, claims administration and insurance programs of the county to control risks and loss.
- Reviews all contracts to reduce county liability.
- Reviewing safety committee minutes and reports.
- Communicating safety program progress and directions to the County Administrator.
- Reviewing, acquiring, and managing the County’s insurance programs.

## **SAFETY MANAGER**

The Safety Manager is responsible for the overall supervision of the Horry County safety program. The Safety Manager will work with management and other entities to ensure all areas of safety are addressed. The Safety Manager is responsible for:

- Developing and delivering programs to ensure the county’s compliance with federal, state, and local safety-related regulations; in addition to other environmental health, safety, and loss prevention standards and guidelines.
- Conducting claims investigations and evaluating risk management claims information to identify significant hazards and corrective actions needed.
- Performing regular physical inspections of county operations, grounds, buildings, and equipment and monitoring of employees to ensure safety compliance.
- Developing, delivering, and providing ongoing safety and loss prevention training.
- Developing safety initiatives and programs that promote operational efficiency.
- Prepares, distributes, and issues reports as required or recommended by federal, state, and local policy or guidelines.
- Serves as a liaison to Safety Committee(s) to oversee implementation of programs and recommendations.

## **CLAIMS COORDINATOR**

The Claims Coordinator is responsible for the overall processing and handling of claims filed by employees, the county, and the public. The Claims Coordinator will work with providers, third party administrators, management and other individuals to assure that all areas are addressed. The Claims Coordinator is responsible for:

- Keeping staff informed of new claim procedures and compliance issues.
- Recording and filing incidents, claims and loss control data.
- Acts as the primary liaison with county departments, employees and other parties for workers compensation claims, and other loss, damage and injury issues.
- Keeps all parties informed of workers compensation claims status.
- Coordinates Horry County’s return to work program.

## **DEPARTMENT HEADS**

Department heads are responsible for all safety programs and activities within their department. They will identify and/or address safety issues of the department and encourage enthusiasm and interest in the safety program. Department heads are also responsible for providing the support, financial resources, and overall safety leadership in the department. They must aggressively implement and provide a positive direction for the County and department's safety program. Department heads are responsible for:

- Enforcing department, county, state, and federal safety policies and regulations.
- Providing leadership by setting the example.
- Developing policies and procedures and ensuring they are complied with by all personnel under their direction
- Implementing a means for employees to make safety suggestions and recommendations, taking appropriate actions on suggestions and communicating results to employees.
- Supporting safety activities, programs and policies.
- Identifying safety training requirements and needs of the department.
- Communicating safety updates to employees.
- Recognizing employees who positively contribute to the department's safety program.
- Reporting all accidents and incidents immediately to Risk Management
- Investigating all accidents that involve their employees or occur within their work areas, and completing final documentation of such within 48 hours.
- Reviewing and investigating all incident reports and taking action to eliminate probability of recurrence.
- Correcting hazards identified by subordinates and Risk Management staff in a timely manner.
- Training of employees initially and annually as needed.
- Orientating new employees to hazards, safety procedures, and work assignments prior to placing them at work.
- Ensuring that all employees are physically and mentally capable of performing assigned tasks.
- Holding supervisors accountable for preventable injuries incurred under their supervision.
- Ensuring regular safety meetings are conducted with employees to review accidents, analyze their causes and promote free discussion of work hazard problems.
- Completing reports and corrections requested by Risk Management. Reports may be shared with Assistant County Administrators and County Administrator.
- Establishing specific time frames for employees to comply with department and the County's safety policies and procedures.
- Designating in writing a Department Safety Coordinator and alternate as a focal point for all safety matters within the department.
- Ensuring that all employees under their supervision that are required to wear any type of respirator have had necessary medical testing and respirator fit testing completed prior to wear of respirators

- Providing personal protective equipment and instruction as required and follow up on proper use of safety equipment
- Ceasing any unsafe operation until deficiencies have been corrected and take steps as necessary to eliminate recurrence; training, disciplinary action, etc...
- Obtaining bids/estimates, certificates of provider's liability insurance, funding, and authorization to complete repairs and modifications that resolve safety issues in a timely manner. See certificate of Liability Insurance requirements in Appendix "B" of Chapter 1.

**SUPERVISORS:** Supervisors shall thoroughly instruct their personnel in safe practices to follow in performance of their work and enforce all safety standards and requirements. Supervisors shall act positively to eliminate potential hazards within activities under their jurisdiction and they will set the example of good safety practices at all times. Principal duties of supervisors are as follows:

- Enforce all safety rules and procedures
- Immediately report and document all near miss situations, accidents/incidents, and injuries even if injury is not readily evident
- Provide leadership by setting the example, be responsible for operating safely
- Provide employees with complete safety instructions and training regarding their duties prior to the employee's actually starting work. Never leave an employee unsupervised that has not demonstrated complete understanding of the procedure at hand, including all aspects of safety awareness
- Conduct thorough inspection of all equipment before it is placed in operation and ensure defective equipment is not used
- Ensure equipment is properly maintained and not abused during use
- Continuously monitor employees performance and safety awareness for unsafe practices and conditions and take immediate corrective action
- Maintain good housekeeping standards and cleanliness during operations as required by law
- Provide safety equipment and protective devices for each job based on knowledge of applicable standards and on recommendation of Safety Director
- Conduct pre-task safety briefings, and encourage employee safety suggestions
- Give full support to all safety procedures, activities, and programs

**EMPLOYEES:** All employees are required, as a condition of employment, to exercise care in the course of their work to prevent injuries to themselves and to fellow workers. Employees are required to:

- Wear prescribed uniform and safety equipment while performing their duties
- Do not operate equipment without proper training or orientation, and without necessary guards in place
- Warn co-workers of unsafe conditions or practices they are engaged in which could lead to or cause an accident
- Immediately cease the use of any equipment found defective and report it to supervisor
- Report all dangerous or unsafe conditions that exist in the workplace or in the County that could cause injury or damage to employees or the public
- Report all injuries and accidents regardless of severity, immediately
- Maintain tools and equipment, and use properly to eliminate possibility of injury from defective tools or improper use of tools
- Participate in all required safety and occupational health training and fully understand instructions before beginning work

**SAFETY COMMITTEE:** This committee functions as an advisory body to develop and recommend matters of policy and procedures affecting administration of the Horry County safety program to the County Administrator, Assistant County Administrators, Department Heads and Risk Manager.

The Safety Committee will be comprised of:

Chairman; Risk Management Staff

County Administrator or his/her designee

A minimum of ten representatives, three from each Division, and one from the Airport, rotated on an annual basis

Meetings shall be held monthly. The Safety Manager will provide an agenda and the Secretary will keep minutes of the meeting. Permanent records of minutes shall be retained by the Safety Manager

The committee is responsible for:

- Recommending and promoting safety rules, policies, programs and activities that will increase awareness and adherence to established safety guidelines.
- Reviewing and acting upon safety inputs from all levels.
- Performing onsite inspections/evaluations of personnel, equipment, procedures, and facilities as needed.
- Providing recommendations on safety matters to Departments and County Administrator(s) for action.
- Reporting identified safety deficiencies to appropriate levels of supervision to eliminate or resolve safety concerns in a timely fashion.
- Reviewing and updating of Horry County written safety policies annually.



**NEW EMPLOYEE ORIENTATION AND TRAINING:** An effective safety program is made possible through quality supervision, employee training, and a thorough understanding (by all employees) of the accomplishment of hazardous jobs, and the consistent adherence to established rules in daily operations.

All new employees will receive safety orientation before starting work (this will be documented).

The immediate supervisor will provide task specific safety training and/or certification as required for each job, to ensure employee can perform all facets of the task safely. Documentation acknowledging training completion will be maintained within the department.

**GENERAL:**

Training of new employees in job responsibilities, proper methods and techniques, and the hazards associated with the job function are important elements in maintaining safe operations. Supervisors are responsible for ensuring that all newly assigned individuals receive adequate training before beginning work.

Formal training is required for all employees engaged in hazardous operations such as; confined space entry, respirator use, working with chemicals, electricity and other hazardous functions as required by OSHA.

If the employee demonstrates, through ineptitude, unsafe acts, or accidents that he/she does not understand the safety requirements of the job, the employee will be retrained and re-accomplish on-the-job training, and be personally counseled by the supervisor and department head (this will be documented).

**INITIAL AND RECURRING TRAINING:** Training (as a minimum) shall consist of the items listed in Appendix A of chapter 1. The training includes review of written programs, hands on demonstration, videos and testing. All employees do not require 100 percent of the listed training; therefore the training matrix provided to each department in their Written Hazard Assessment identifies required training within that department. All employees shall receive additional training as directed by Department Heads and as listed in Departmental policies.

**ON-THE-JOB TRAINING (OJT):** OJT shall be administered by supervisors and foremen responsible for the individual. This training should include:

- Explanation and demonstration of safety programs and procedures
- Issue and explanation of personal protective equipment required for the task
- Emergency treatment of injuries
- How to report a fire or serious injury and/or accident
- Specific hazards associated with the job
- General hazards encountered in the work area and how to avoid them

## **ACCIDENT REPORTING**

- Initial reports (S&E Employee Report and Worker's Comp First Report of Injury) must be completed immediately if possible, but not later than 24 hours.
- The S&E Supervisors Investigation Form and Department Accident Audit Checklist must be submitted with Department Head signature within 48 hours. Additional time may be granted by Risk Management as necessary, and reports can be amended as required.
- Any accident involving death, permanent disability, temporary disability, hospitalization, medical treatment, lost work time, damage to or destruction of any property or injury to a contractor or visitor will be investigated.
- Death of a single employee or hospitalization of 3 or more employees must be reported immediately to Risk Management so they can notify the SC Department of Labor within 8 hours. If Risk Management is not available the supervisor must report to the following within 8 hours:

**Fatality Reporting**  
**803-896-7672 (24 hour service)**  
**(fatalities must be reported to the Office of S.C. OSHA**  
**Within 8 hours of death)**

## **ACCIDENT INVESTIGATION**

- Accident investigation will be performed by the immediate supervisor of the employee involved; with the assistance of the Risk Management as required. If two or more employees were involved in the same accident, the supervisor of each employee will investigate.
- The accident investigation will be initiated as soon as possible after the accident occurs.
- The purpose of accident investigation is to prevent the reoccurrence of accidents by identifying contributing causes, determining corrective measures necessary to eliminate causes, and disseminating information on accident prevention to all employees. Accurate and complete accident reports are essential to identify and remedy the causes.

## **POST-ACCIDENT DRUG TESTING**

Post-accident drug testing will be conducted in accordance with the Horry County Personnel Policy.

## **SELF INSPECTIONS**

Conducting self-inspections to identify hazardous work conditions and hazardous materials is an important part of safety. Department Heads are encouraged to perform self-inspections that are geared toward discovering hazards and taking steps to prevent injury to employees.

## **SAFETY BULLETIN BOARDS AND SUGGESTION BOXES**

Each department head should maintain a safety bulletin board. Safety related material and OSHA required posters/logs should be visible at all times.

A safety suggestion box may be maintained for employees to submit safety suggestions, or an alternate method of receiving and documenting suggestions will be used. These suggestions will be discussed at departmental safety meetings and by the safety committee if applicable.

## **DISCIPLINARY POLICY FOR SAFETY VIOLATIONS**

Department Heads may request evidence collected by the Supervisor/Risk Management on all accidents involving safety violations.

If an accident is deemed avoidable, the department head may administer appropriate disciplinary action in accordance with the Horry County discipline policy. If an employee questions the disciplinary action, they may utilize options outlined in the County Grievance Procedure.

### **DISCIPLINE**

It is recognized that some employees will violate work rules/policies and commit unsafe acts. Unsafe acts or safety violations should be corrected immediately. It should be emphasized that safe work rules/policies and driving procedures must be enforced for the protection of the employee and the County.

In each instance, the monetary value or cost incurred as a result of an accident is not addressed since the cost of the accident should not dictate the corrective action to be administered. Management should discourage any implication that it is acceptable to have an inexpensive accident. The same action that causes little accidents also creates big accidents; therefore the *emphasis* is placed on accident prevention.

Careful consideration has been given to the wide range of County employees whose job classifications include the responsibility of operating motor vehicles and motorized equipment. All persons that operate a County vehicle or other equipment are obligated to take the necessary precautions to avoid accidents and injuries.

Distinctions will not be made as to the frequency or distance that a vehicle or equipment is operated. The fact that one job classification requires more driving than another, is not adequate justification to provide different expectations for safe operation. Although one job might require a more highly skilled operator than another, it is the department head's responsibility to enforce the applicable safety rules and review each employee's previous accident record to determine the need for additional training or discipline.

### **DISCIPLINARY ACTIONS:**

Disciplinary actions are to be carried out in accordance with Horry County Government's Personnel Policy, Article VIII and Article IX.

APPENDIX A (Required Training)

	Req. By:	Reference	Course	Comp- Person or Certified?	Req. For:	Required
1	OSHA	1910.38e	Emergency Action Plan		ALL	Initial
2	OSHA	1910.165b4	Employee Emergency Alarm Systems		ALL	Initial
3	OSHA	1910.39d	Fire Prevention Plan		ALL	Initial
4	OSHA	1910.155c41	Fire Extinguisher (hands on)		*	Initial
5	OSHA	1910.157g2	Fire Extinguisher (refresher)		*	<b>Annual</b>
6	OSHA	1910.151b	First Aid		*	3 yrs
7	OSHA	1926.50c	First Aid (Construction)		*	3 yrs
8	OSHA	1910.146k2iii	CPR (Confined space rescue team)		*	2 yrs
9	OSHA	1910.410a3	CPR (Dive team)		*	2 yrs
10	OSHA	1910.1200h1	Hazard Communication		ALL	Initial
11	OSHA	Gen Duty	Ergonomics (Awareness)		ALL	Initial
12	OSHA	1910.1030g2	Blood Borne Pathogens		*	<b>Annual</b>
13	OSHA	1910.132f1	Personal Protective Equipment		*	Initial
14	OSHA	Gen Duty	Flagging (MUTCD)		*	Initial
15	OSHA	1910.147c7	Lock-Out/Tag-out		*	Initial
16	OSHA	1910.146g1-4	Confined Space		*	Initial
17	OSHA	1926.651k1	Excavations (Trenching Shoring)	Competent	*	Initial
18	OSHA	1910.134k	Respiratory Protection Training		*	Annual
19	OSHA	1910.134e1	Respirator Medical (as required by standard)		*	Initial
20	OSHA	1910.134f2	Respirator Fit Test		*	Annual
21	OSHA	1910.95k	Hearing Protection		*	<b>Annual</b>
22	OSHA	1910.95g6	Hearing Test (annual audiogram)		*	<b>Annual</b>
23	OSHA	1910.67c2ii	Vehicle Mounted Elevating Platforms		*	Initial
24	OSHA	1910.66j	Personal Fall Arrest Systems		*	Initial
25	OSHA	1910.145f4v	Accident Prevention Signs/Tags		*	Initial
26	OSHA	1910.177c	Servicing of Single/Multi-piece Wheel Rims		*	Initial
27	OSHA	1910.177f	Safe Operating Procedure, Multi-piece Rim		*	Initial
28	OSHA	1910.177g	Safe Operating Procedure, Single-piece Rim		*	Initial
29	OSHA	1910.178L1i	Forklift Operator	Certified	*	3 Years
30	OSHA	1910.179b8	Crane Operator	In writing	*	Initial
31	OSHA	1910.253a4	Oxygen Fuel Gas Welding & Cutting	Competent	*	Initial
32	OSHA	1910.254a3	Arc Welding & Cutting		*	Initial
33	OSHA	1910.332c	Electrical Safety Training		*	Initial
34	OSHA	1910.1001j7	Asbestos		*	Annual
35	OSHA	1926.302e1	Powder Actuated Hand Tools		*	Initial
36	OSHA	1926.404b1iiib	Assured Equipment Grounding	Competent MGR	*	Initial
37	OSHA	1910.28d12	SCAFFOLD (competent person required)	Competent	*	Initial
38	OSHA	1926.503a2	<b>Fall Protection</b> (trained by competent person)		*	Initial
39	OSHA	1926.756a2	Steel Erection	Competent	*	Initial
40	OSHA	1926.850a	Demolition (survey by competent person)	Competent	*	Initial
41	OSHA	1926.1060a	Ladders (trained by competent person)		*	Initial
42	OSHA	1926.21b2	Unsafe Conditions		*	Initial
43	OSHA	1928.57a6	Farm Equipment Operating Instructions			Annual
44	OSHA	CPL 02-01-052	Workplace Violence			Initial

	Required By:	Reference	Course	Required For:	Required
45	County	1910.243e	Powered Grounds Keeping Equipment	*	Initial
46	County	1910.211-219	General Machine Safety	*	Initial
47	County	1926.600-604	Heavy Equipment Operation	*	Initial
48	County	1910.266	Chain Saw	*	Initial
49	County	1960.10	SCOSHA Rights & Responsibilities	ALL	Initial
50	County		Accident & Incident Reporting	ALL	Initial
51	County		Safety Intervention/Claims Procedures	ALL	Initial
52	County		Sexual Harassment	ALL	2 years
53	County		Driver Training	ALL	4 years
54	County		Wellness Education	ALL	Initial
55	County		Back Safety	ALL	Initial
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Initial training: training will be conducted when the employee is hired, reassigned, new duties added, or when anything affecting the task changes.

Competent Person: means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them, and who has authorization to take prompt corrective measures to eliminate them.

Required For:

- ALL = Required for ALL Employees
- \* = As directed by Department Head

NOTE: Individual Department Training Matrixes are located in the Written Hazard Assessment for each Department.

## **Chapter 1 – Appendix B Certificate of Liability Insurance Requirements**

The requirements listed below were established to insure that assets and financial resources of the County of Horry received maximum protection. They will set standards in areas where exposure to loss is similar. They will also assist individual departments in selecting the proper insurance provisions to be included in contracts, franchises, leases, permits, use agreements, and other arrangements. Contract insurance requirements must be met. Departments shall include a copy of vendor/contractor's Certificate of Liability Insurance with contracts routed for approval and ensure that a copy is provided to the Risk Manager. Receipt of a non-compliant certificate, other documentation of insurance or policies does **Not** constitute a waiver of the vendor/contractor's obligation to fulfill the insurance requirements of the County.

These requirements establish the minimum acceptable standards/limits. However, it should be noted that these standards/limits are subject to review and modification as conditions warrant or in response to specific risk exposure. Contact the Risk Manager if assistance is needed in establishing higher limits or review of limits. Below are the minimum acceptable standards/limits.

### **Certificate of Liability Insurance from Contracted Professional Services or Providers:**

When Horry County enters a contract or agreement for service or equipment, all contractors (such as construction and professional service companies) that provide the service shall indemnify Horry County against general liability claims and shall maintain workers' compensation coverage while performing the service. Departments requesting the contracted service or products must obtain the appropriate certificate of insurance from the vendor/contractor prior to contract execution and submit it to Procurement with contract and copy it to Risk Manager.

#### **A. Certificate of Insurance Requirements:**

1. Workers' Compensation: is required in all County contracts if the contractor/vendor has employees (with the rule of thumb being 4 or more employees). Employer's Liability insurance shall be provided in amounts not less than \$100,000 per accident.
2. Commercial General Liability coverage shall be provided with minimum liability limits of **\$1,000,000** per occurrence, Combined Single Limit for Bodily Injury and Property Damage. This shall include coverage for: premises/operations, products/completed operations, contractual liability, independent contractors and vehicles used in premises/operations.
3. Professional Liability insurance shall be provided with minimum liability limits of **\$1,000,000** per occurrence (in addition to Commercial General Liability insurance) by professional services such as accountant, attorney, architect, design, engineering and most consultants that involve errors and omissions exposure protection.

## **B. Special Requirements:**

- The County of Horry shall be named as an Additional Insured on all General Liability policies and expressed on the Certificate of Liability Insurance.
- The County of Horry shall be given thirty (30) days notice prior to cancellation or modification or reduction in limits of any stipulated insurance.
- An appropriate Indemnification Clause shall be made a provision of the contract.
- Contracts shall express that it is the responsibility of the vendor/contractor to ensure that all subcontractors comply with all insurance requirements.

### **Builder's Risk Insurance Needed for Construction Projects:**

Contact the Risk Manager to determine if the **contractor or the County should acquire** Builder's Risk Insurance. Builders Risk insurance must be acquired for the construction of a new building or the major improvement, alteration or renovation of an existing structure.

#### **Insurance Requirements:**

1. Builder's Risk: coverage shall be with limits equal to 100% of the completed value of the structure(s), building (s) or additions (s).
2. Machinery or Equipment Endorsement: when the contract calls for the installation of machinery or equipment as a permanent part of the structure, the contractor's policy should be endorsed to provide coverage during transit. Construction materials beyond 100 feet of the structure are normally not covered by County insurer.
3. Coverage Acquisition: contact the Risk Manager at least thirty (30) days before project commencement to arrange for Builder's Risk coverage.

### **Umbrella Liability Insurance Alternative:**

A combination of Umbrella/Excess and primary limit may be used to provide coverage for the amounts required.

### **Special Contract Considerations:**

When a contract does not fit neatly into one of the preceding categories, it is therefore necessary that the contract be thoroughly examined to determine potential exposures and to allow for the establishment of insurance requirements that reasonably address the risk and which do not place undue financial hardship on the parties to the agreement.



### **Standard Hold Harmless and Indemnification Clause:**

The Contractor agrees to protect, defend, indemnify and hold the County of Horry and its officers, agents, and employees free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising out of this agreement and/or the performance hereof. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

**Special Note:** County departments should not agree to name vendor/contractor as an additional insured and should avoid signing hold harmless or indemnification agreements. That agreement may place a financial burden on the County as losses caused by another party are not covered by our insurer, South Carolina Budget & Control Board - Insurance Reserve Fund.

### **Use of Insurance Proceeds and Settlements:**

- Department must follow Procurement Procedures, including acquiring adequate quotes or bids for purchases.
- Department should consult with Budget Department if proceeds and/or repairs/replacements are not received within fiscal year of loss incident.
- Department should consult with Maintenance Department on building damages and repairs.
- Department should contact Fleet Maintenance to arrange/assist with repairs or replacements of vehicles.

## CHAPTER 2

### *GENERAL SAFETY REQUIREMENTS*

*01 July, 2012*

#### **Rights and Responsibilities under OSHA**

The OSHA Act of 1970 was created to assure safe and healthful working conditions for working men and women. This act also established that employers and employees have responsibilities one to another as follows:

Each employer shall:

- (1) Furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.
- (2) Shall comply with occupational safety and health standards promulgated under this Act.

Each employee shall:

Comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

By law, employers and employees have certain rights and responsibilities. The principle ones are as follows:

#### **Employer Rights and Responsibilities under OSHA**

Employers must:

1. Provide a workplace free from recognized hazards.
2. Comply with regulations and standards.
3. Keep employees informed of protections and obligations under OSHA.
4. Provide personal protective equipment to employees *as required by OSHA standards*.
5. Pay for medical examinations or tests *as required by OSHA standards*.
6. Give employee or employee representative an opportunity to attend any meeting between employer and an OSHA representative concerning a citation or disposition of a complaint.
7. Allow compliance officers to conduct inspections and investigations.
8. Not penalize or discriminate against an employee for participating in an OSHA inspection or investigation.
9. Post a copy of OSHA citations and other actions at or near the place of violation.
10. Keep and post required records.

Employers have the right to:

1. Seek advice and consultation from OSHA.
2. Apply for variance to regulations.
3. Receive a copy of the written complaint at the time of an investigation, with the employee's name deleted if so requested.
4. Have inspections or investigations conducted in a manner that is not unreasonably disruptive to the work operation.
5. Accompany the OSHA representative during an inspection or investigation.
6. Have a closing conference with the OSHA representative after an inspection.
7. Appeal any citation.

**Employee Rights and Responsibilities under OSHA**

Employee's have the right to:

1. A workplace that is free from recognized hazards.
2. Be informed of their rights and protections under OSHA.
3. Have personal protective equipment (PPE) supplied at the employer's expense *as required by OSHA*.
4. Request an OSHA inspection by giving written notice to OSHA.
5. Employee representation at any meeting between OSHA and the employer concerning a citation or complaint.
6. Employee representation during compliance officer's opening and closing conferences with employer.
7. Not be penalized or discriminated against for exercising rights under OSHA.
8. Request and receive adequate information and training from the employer regarding hazards in the workplace.

Employee's must:

1. Comply with all OSHA regulations and standards.
2. Follow all employer health and safety rules and regulations.
3. Wear the prescribed personal protective equipment for the job.
4. Report hazardous conditions and any job-related accidents and injuries immediately.
5. Not damage or remove safety guards and devices.

## **What to do when a OSHA Inspector shows up at any Horry County Worksite**

Any visit from an OSHA inspector should be taken very seriously. When an inspector arrives, employees shall immediately contact their supervisor. The supervisor will **contact Risk Management immediately** and arrange for Risk Management staff to be present at the inspection. In the meantime, the OSHA officer should be treated cordially until all appropriate personnel are assembled and the "opening conference" and inspection can begin.

It is the employer's and employee's right to be adequately represented at any OSHA inspection, and we need to be assured that this right is exercised. This does not in any way abridge an employee's right to speak to the inspector confidentially during the inspection process.

### OSHA Recordkeeping and Posting Requirements

OSHA requires that certain injuries and occupational illnesses be recorded on the designated form called the OSHA log. This is done by Risk Management. Each facility will receive an annual summary report of all injuries and illnesses sustained by employees during the previous year that must be posted (four months) from February 1 to April 30.

Other required postings include the following:

- South Carolina Safety and Health Protection on the Job
- Federal Minimum Wage
- Equal Employment Opportunity
- Notice to Employees Working in State and Local Governments
- South Carolina Employment Security Act Notice to Employees

Departments are required to maintain the postings in prominent areas accessible to all employees and assure that the postings are not defaced or covered in any way. Human resources will assist with reviewing and posting of all required items.

## **Incident-Accident Reporting**

An incident report must be completed using the designated form (see HC Café website) whenever an on-duty employee is involved in an incident where damage to County or non-County property occurs, and/or results in an injury or illness. All on-the-job injuries and illnesses must be reported regardless whether medical treatment was provided or lost time occurred.

Incidents occurring on County property that involve non-employees or patrons of County services should be reported on the form indicated above. Each initial report shall be completed and filed with Risk Management within twenty-four (24) hours or next business day. When a hazard is observed, actions should be taken to prevent potential injuries and immediately reported to your superior.

### **Report of Loss**

Below is a brief list of information that department heads should provide to Risk Management:

1. Time and date supervisor was notified about accident.
2. Date and location of the accident (street address if available).
3. Names addresses and phone numbers of all claimants.
4. Names, addresses and phone numbers of any witnesses (including other employees).
5. Immediate initial report (investigation) of the incident to Risk Management within 24 hours.
6. A description of what is alleged to have occurred and estimated losses.
7. A copy of the traffic officer's (Highway Patrol, Police, etc.) report or any other official reports on the accident.

### **Witnesses**

Request written and signed statements from all witnesses; **do not give a witness statement to a non-traffic officer or non-court judge, unless our County attorney, insurer, or insurer agent is present.**

### **Lawsuits**

It is of utmost importance that the County Attorney's Office receives all suit papers **immediately!** They have 20 days in federal court and 30 days in state court to file an answer to the complaint. A delay in forwarding the lawsuit could cause the County to go into default. **Contact the County Attorney's Office immediately upon receipt of any legal papers.**

Provide the following information regarding any suit papers:

1. The exact date of service of the Summons and Complaint.
2. On whom the papers were served.
3. How the papers were served. (Certified Mail, Process Server, etc.)

### **County Claims**

In the event of damage to County property, it is our responsibility to take appropriate action to protect any property from further damage, (for example, cover a hole in roof, etc.). Determine the exact date of the loss, the location(s) of the loss, a description of how the loss occurred and repair estimates.

### **Safety Audits**

Department heads are responsible for conducting all OSHA required inspections of their facility, making immediate corrections as needed to prevent accidents.

## Accident Investigation

Accident investigation forms are located on the HC Café website. Supervisors and employees should complete the applicable sections for all incidents.

The primary goal of accident investigation is to determine root causes and prevent such incidents in the future. Completing an accident investigation immediately after an incident is very important. The supervisor, department safety committee member, or accident investigation team must use the incident reporting forms to standardize the documentation of findings and recommendations.

### Why Investigate Accidents?

- To determine underlying causes ("*hazard of the job*" is not an acceptable explanation).
- To prevent similar accidents by implementing corrective action (corrective action ought to be more than "employee should be more careful").
- To document facts for insurance, legal, and regulatory needs.
- To provide cost data
- To reinforce commitment to safety.

### Who's responsible for accident investigation?

Department heads are responsible for accident investigations.

### Who should investigate accidents?

- Department heads may investigate or delegate task.
- First line supervisors conduct the initial investigation.
- Seek assistance as needed from other sources such as Risk Management.

All persons that perform investigations should be trained in accident investigation techniques. Fairness and objectivity are essential.

### Which accidents should be investigated?

All accidents involving personal injury or damage to property should be investigated in some form. Sometimes the difference between a major and minor accident is sheer luck. Serious accidents or potentially serious accidents should have the benefit of being investigated.

### When should accidents be investigated?

People forget important information, or become biased as they discuss the incident with others. Evidence also tends to disappear with time.

The investigation will be conducted immediately after the accident, and filed with Risk Management.

**An initial report must be completed and filed within 24 hours, consists of:**

- **Workers Comp First Report of Injury**
- **S&E Report – Employee Report (page 1)**
- **E-mail initial report to [rmclaims@horrycounty.org](mailto:rmclaims@horrycounty.org)**

**The final report must be completed and filed within 48 hours and consists of:**

- **S&E Report – Supervisor Investigation Report (page 2)**
- **S&E Report – Department Accident Audit Checklist (page 3)**
- **Photographs, witness statements, and all other papers should be attached with final report.**

**What should investigators look for?**

1. Direct, Surface, and Root causes – unsafe acts, unsafe conditions, inadequate work systems or individual in nature. Search for facts rather than *faultfinding*. Look at equipment, environment, behaviors, and management.
2. Corrective actions - obtain as many as possible; consider equipment, environment, behaviors and management. Get ideas from those involved.
3. Follow-up - be sure corrective *actions* are taken in a timely manner. Evaluate their effectiveness and develop alternate solutions if necessary.



## Accident Reporting Procedures

### **ON-THE-JOB INJURY PROCEDURES**

- ◆ Report any injury immediately to designated supervisor on duty for assistance. Use first aids (i.e., eyewash, bandages on cuts/scrapes, etc.) for minor injuries.
- ◆ If necessary, seek medical attention at employer's designated medical provider.
- ◆ Supervisor should accompany employee(s) to the approved medical facility or meet them there.
- ◆ Supervisor should use best judgment to ensure employee receives treatment as necessary. If employer's designated medical provider is closed or injury is life threatening or severe, seek treatment at nearest hospital facility. If in doubt about injury severity, call 911.
- ◆ Advise medical facility that you are an employee with Horry County and have been injured on the job.
- ◆ DO NOT supply personal medical insurance information if you were injured at work.
- ◆ Supervisor must complete Investigation Report immediately following the incident.
- ◆ Department must e-mail completed First Report of Injury form to Risk Management within 24 hours of injury. E-mail to [rmclaims@horrycounty.org](mailto:rmclaims@horrycounty.org).
- ◆ Supervisor should initiate an accident investigation using the S&E report. Report must be sent to Risk Management within 48 hours of accident.
- ◆ Risk Management will conduct follow-up(s) with injured employee, supervisors and may conduct an investigation.
- ◆ All follow-up appointments must be pre-approved. Contact Claims Coordinator for authorization (pre-approval).
- ◆ Employee must provide doctor's note if placed on light duty or excused absence, or any other duty restrictions.
- ◆ **CLAIMS MAY NOT BE PAID OR PAYMENTS MAY BE DELAYED BY WORKERS COMPENSATION IF THE ABOVE PROCEDURES ARE NOT FOLLOWED.**
- ◆ Department head or supervisor should follow up on employee's progress weekly and attend scheduled workers' compensation hearings.
- ◆ Employee must provide Return to Work (RTW) Release Form from the doctor before returning to active or restricted work status.
- ◆ Refer to Horry County Return to Work Policy (light duty) when release form includes work restrictions.

### **VEHICLE ACCIDENT REPORTING PROCEDURES**

#### **For County Employees and Volunteers**

- ◆ Turn the vehicle ignition off.
- ◆ Call for medical assistance, if necessary. (911)
- ◆ Call 911 for a SC (or City) Highway Patrol Officer to report accident. Immediately notify your designated supervisor on duty about the accident.
- ◆ Do not admit responsibility or guilt to anyone at the scene of the accident; provide facts only to law enforcement and county employees.
- ◆ Obtain the necessary data to complete page one of the County's Supervisor's Incident Investigation Report and Employee Incident Report.
- ◆ The supervisor shall immediately notify Risk Management of the accident that day (or next business day if no injury). Immediately provide notice by faxing the Highway Patrol Officer's initial report to Risk Management and Fleet Services.
- ◆ Supervisor must contact County's designated medical provider to arrange for County driver to have POST ACCIDENT DRUG TEST within 24 hours (plus alcohol test within 2 hours for CDL driver, otherwise it is at the supervisor's discretion to have non-CDL driver alcohol tested). If all three of the following conditions apply: vehicle was parked, not moving, and not occupied when accident occurred, then supervisor may exclude operator from drug test.
- ◆ The supervisor shall forward (Supervisor's Incident Investigation Report and Employee Incident Report) initial S&E Report within 24 hours and completed final report within 48 hours to the Risk Management by e-mail at [rmclaims@horrycounty.org](mailto:rmclaims@horrycounty.org).
- ◆ Any other vehicle and heavy equipment damages (i.e., vandalism, broken window, etc.) must be reported immediately to the Horry County Police at 915-5350 (or City Police) for generation of a Police Report.
- ◆ Contact Fleet Services within 24 hours (or next business day) to have vehicle repaired or appraised for all repairs, including minor dents or other damages and provide Fleet Services with initial S&E Report.
- ◆ County Vehicle Insurance Information: Carrier: see insurance card in glove compartment.

Additional Information: contact Risk Management 915-5230

Note: Everyone should take the extra steps to prevent accidents, including backing incidents.

## **NON-EMPLOYEE ACCIDENT/INJURY REPORTING PROCEDURES**

- ◆ Immediately notify Risk Management 915-5230.
- ◆ Render first aid and call *911* for medical assistance, if necessary. The non-employee will be responsible for emergency transport service costs if they elect to ride in an ambulance.
- ◆ Do not admit responsibility or guilt to anyone regarding the accident.
- ◆ Ask the non-employee to complete a written statement of what happened and provide contact information on plain paper (non-county form).
- ◆ Ask witnesses to complete a written statement and provide their contact information.
- ◆ Take photographs of area and anything that may have caused the accident/injury.
- ◆ If the individual refuses to give a written statement or is unable to do so; as a minimum you must get their name and contact information to go into your report to Risk Management.
- ◆ The county employee that has completed the above shall complete a written report (statement) on the incident and forward to Risk management immediately along with photographs and any other evidence.
- ◆ Risk Management will contact the injured party to inform them of claims procedures.
- ◆ Do not transport non-employee; if they do not want an ambulance they can contact a friend, neighbor, family member, or even a cab if they are unable to drive.
- ◆ Do not send non-employee to any particular treatment facility, they may chose where they want to go at their own expense.

**For Additional Information: contact Risk Manager 915-5230**

## **Aerial Work Platforms**

This section pertains to aerial work platforms: also known as forklift baskets, scissor lifts, or any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel.

**Purpose:** To ensure the safety of employees operating or working from aerial work platforms.

### **Policy**

1. Equipment shall be inspected daily or by each new operator that uses it throughout the day.
2. Must have at least a 36-42" guardrail , mid-rail and 4" toe board
3. Operator must be aware of overhead electrical wires and other obstructions.
4. For operations near overhead electric power lines, see 1910.333(c) (3).
5. Only properly trained individuals may operate lift.
6. Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
7. Boom and basket load limits specified by the manufacturer shall not be exceeded.
8. Belting off to an adjacent structure or equipment while working from an aerial lift is not permitted
9. A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift
10. Boom and basket load limits specified by the manufacturer shall not be exceeded
11. The brakes shall be set and outriggers shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline.
12. An aerial lift truck may not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation
13. Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position
14. Articulating boom and extensible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency

### **Responsibility**

All levels of supervision and operators of power aerial lift trucks.

## Training

Who should be trained - All employees who use this equipment must be trained and documented.

How often – Initially and as required with new equipment or retraining due to lack of knowledge.

Who provides – Department Heads are responsible for ensuring personnel receive training. The supervisors of County employees who work with aerial lift trucks are to insure that they are properly trained for their duties and have sufficient knowledge of the applicable OSHA standards

Resources – OSHA 1910.67 and OSHA 1926.453

## Driving Safety

### Applicability

All County employees who operate vehicles as part of their job responsibilities

### Purpose

The purpose of this policy is to ensure the safety of employees, passengers, pedestrians and other motorists. To prevent damage to county vehicles and personal property, and to comply with state and local traffic regulations.

### Policy

**All persons that operate vehicles owned, leased, or otherwise provided by Horry County Government shall:**

1. Possess and maintain valid driver's license for the class of vehicle operated.
2. **Wear seat belts and shoulder harnesses (As a condition of employment).**
3. Obey all state and local motor vehicle laws (Public Safety, when responding with lights and siren must use due regard for the safety of the public).
4. No riders may be on any part of a vehicle or trailer other than in approved seats with seat belts, unless otherwise allowed by state law.
5. Avoid backing when rear vision is limited. A spotter must be used if available, if no spotter then the operator must conduct a walk-around before backing up and visually check the rear of vehicle for obstacles and clearances.
6. Operators and/or spotters may be held responsible for damage to county vehicles and personal property that occurs while backing.
7. Be familiar with the height and width of vehicle when operating in narrow paths or near low clearances. Do not take large vehicles through drive-thru windows or beneath over hanging structures.
8. Maintain the vehicle in safe condition, reporting any damage, malfunction, or maintenance issues to Fleet Maintenance immediately.
9. Inspect vehicle for damage prior to operation, and immediately report that damage so the responsible party can be identified.
10. Report all motor vehicle accidents immediately using the County's established accident reporting procedures.
11. Never operate a vehicle when taking medications that may impair driving.
12. Know how to summon **911** using the radio in radio-equipped vehicles.
13. Use defensive driving techniques at all times.
14. CBs, two way radios, cell phones and other official communication devices shall be used with extreme caution while operating a County vehicle
15. Cell phone use while driving should be limited to official business only, and kept to a minimum.
16. Text messaging or operating a computer is not allowed while driving. This shall not be applicable in instances where Information Technology-based equipment is required and is approved by departments for the performance of county business. Department heads that authorize use of IT equipment while operating motor vehicles are required to develop and implement written safety policies to ensure said equipment is operated in a manner conducive to the safe operation of county vehicles.

17. Avoid distractions (i.e. anything that takes your mind or eyes off the highway)
18. All persons that operate vehicles owned, leased, or otherwise provided by Horry County Government shall participate in an eight-hour defensive driving class initially and a four-hour refresher class every 4 years. Training shall include defensive driving techniques and general driving safety tips.

#### Training

Who provides – Department Heads are responsible for ensuring personnel receive training. Training may be provided by Risk Management, or by qualified instructors within the department that have received RM approved certification. See application for department driver program approval in Appendix “A” of Chapter 2.

Who shall be trained – All vehicle operators

How often – Initially and every 4 years thereafter

References: OSHA Act of 1970, Section 5, General Duty Clause

## Electrical Safety

### Applicability

This section applies to all employees, contractors, and sub-contractors accessing electrical systems on Horry County property.

### Purpose

To ensure that all employees work in an environment free from electrical hazards.

### Policy:

All departments and employees are to follow electrical safety standards as set forth by SCOSHA as a condition of employment.

1. Only qualified person(s) shall install or repair electrical equipment and systems.
2. Electric equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees
3. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.
4. Electric equipment shall be installed in a neat and workmanlike manner and shall be firmly secured to the surface on which it is mounted
5. Unused openings shall be effectively closed to afford protection equivalent to the wall of the equipment
6. Each service, feeder, and branch circuit, at its disconnecting means or over-current device, shall be legibly marked to indicate its purpose, unless located and arranged so the purpose is evident.
7. Lockout/Tag-out procedures are to be followed for work on and around electrical equipment.
8. **All extension cords used in Horry County must be three prong (grounding) type cords.**
9. All electrical equipment and appliances are to be properly grounded. All equipment used outdoors, in damp indoor areas (truck bays) or around water shall be protected by a ground-fault circuit interrupter (GFCI)
10. All temporary wiring installations (and extension cords) that are used during construction-like activities, including certain maintenance, remodeling, or repair activities, involving buildings, structures or equipment require GFCI protection, or a written Assured Equipment Grounding Conductor Program shall be instituted.
11. Sufficient access and working space shall be provided and maintained about all electric equipment to permit ready and safe operation and maintenance of such equipment see 1910-303 for requirements.
12. A workspace of at least 30" wide and 6.5' high, in addition to the space required to open the door, shall be maintained in the area of electrical equipment.
13. Working space required by this standard may not be used for storage, no storage is allowed in closets where circuit breakers and electrical panels are located.
14. Illumination shall be provided for all working spaces about electrical equipment installed indoors. Additional lighting fixtures are not required where the working space is illuminated by an adjacent light source. In electric equipment rooms, the illumination may not be controlled by automatic means only.
15. Power lines - Unqualified personnel shall not work within 10' of overhead lines. Qualified employees shall maintain a distance prescribed by OSHA standards 1910-333.

16. Outdoor electric equipment shall be installed in suitable enclosures and shall be protected from accidental contact by unauthorized personnel, or by vehicular traffic, or by accidental spillage or leakage from piping systems. No architectural appurtenance or other equipment may be located in the working space.
17. In locations where electric equipment is likely to be exposed to physical damage, enclosures or guards shall be so arranged and of such strength as to prevent such damage.
18. Conductive articles of jewelry and clothing (such a watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping, or other insulating means.
19. No electrical equipment or circuit; unless due to its design, operational limitations, or during testing; shall be worked on live.
20. When work is to be done on energized equipment carrying 440 volts or more, two qualified persons shall be present and working together.
21. Temporary lights (portable lights, troubles lights, or lights on drop cords) shall be kept in good working order with their bulbs protected from accidental contact, and waterproof if used around water or in damp areas. They are to be suspended only by the hooks or clips provided for that purpose, not by their cords.
22. Portable ladders." Portable ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized parts.
23. Temporary electrical power and lighting installations of 600 volts, nominal, or less (includes Extension Cords) may be used only as follows:
  - During and for remodeling, maintenance, or repair of buildings, structures, or equipment, and similar activities;
  - For a period not to exceed 90 days for Christmas decorative lighting, carnivals, and similar purposes;
  - For experimental or development work, and during emergencies.
  - Temporary wiring shall be removed immediately upon completion of the project or purpose for which the wiring was installed.
24. (Extension Cords) Flexible cords may be used only in continuous lengths without splice or tap.
25. Conductors entering cutout boxes, cabinets, or fittings shall be protected from abrasion, and openings through which conductors enter shall be effectively closed.
26. All electrical pull boxes, junction boxes, fittings, switches, outlets, and circuit breakers shall be provided with covers identified for the purpose.
27. Cabinets, cutout boxes, fittings, boxes, and panel board enclosures in damp or wet locations shall be installed so as to prevent moisture or water from entering and accumulating within the enclosures and shall be mounted so there is at least 0.25-in airspace between the enclosure and the wall or other supporting surface. However, nonmetallic enclosures may be installed without the airspace on a concrete, masonry, tile, or similar surface. The enclosures shall be weatherproof in wet locations.
28. Switches, circuit breakers, and switchboards. Switches, circuit breakers, and switchboards installed in wet locations shall be enclosed in weatherproof enclosures.
29. All lamps for general illumination shall be protected from accidental contact or breakage by a suitable fixture or lamp holder with a guard.
30. Flexible cords and cables shall be protected from accidental damage, as might be caused, for example, by sharp corners, projections, and doorways or other pinch points.



31. Relocatable Power Taps (RPTs, also known as: "Power strips, Surge Protectors, Spike Protectors or Portable Outlets," must be directly connected to a permanently installed branch circuit receptacle; they are not to be series-connected (piggy-backed) to other RPTs or connected to extension cords.
32. RPTs are not intended for use at construction sites and similar locations (outdoors).
33. RPT's are designed for use with low-powered loads, such as computers, or audio/video components.
34. RPT's are not designed for high power loads such as space heaters, toasters, refrigerators and microwave ovens, which can easily exceed the recommended ampere ratings on many power strips.
35. RPT's must not to be routed through walls, windows, ceilings, floors, or similar openings.
36. Extension cords are not to be connected (plugged in to) RPT's.
- 37. Portable space heaters are not permitted in Horry County facilities. These devices create an over-load condition of electrical systems and create an imminent fire hazard. See Appendix for any exceptions and conditions.**
- 38. Toaster ovens, toasters, hot plates, griddles, grilles, and all cooking equipment items are not allowed in any Horry County facility other than designated kitchen areas (as installed by maintenance department). Cooking in offices and break rooms leads to increased risk of fire and numerous false alarms leading to building evacuations. Food warmers and crock pots used to maintain food temperatures are allowed if they meet all other electrical requirements.**
39. Coffee makers are permitted in offices if they meet all other electrical requirements.
40. Microwave ovens are permitted in offices; however popcorn is not to be cooked in them as it also triggers too many fire alarms.
41. Electric fans must meet one of the following
  - a. Has manufacturer installed three-prong plug,(this is the only type that may be used in damp locations such as vehicle maintenance areas or fire station apparatus bays)
  - b. Has a label (with two squares or two rectangles) indicating double insulated with two-prong plug
  - c. Has plastic casing and NO metal exposed surfaces: frame, pedestal, blade guard (front and back), on-off switch, or any other metal surface that may be touched

## Training

Who provides – Department Heads are responsible for ensuring personnel receive training. The supervisors of County employees who are to work on electrical equipment and circuits are to insure that they are properly trained for their duties and have sufficient knowledge of the applicable SCOSHA standards.

### Who shall be trained –

- Electricians
- Welders
- Blue collar supervisors (1)
- Qualified persons that perform repairs and installations
- Electrical and electronic technicians (1)
- Painters (1)
- Electrical and electronic engineers (1)
- Electrical and electronic equipment assemblers (1)
- Industrial machine operators (1)
- Material handling equipment operators (1)
- Mechanics and repairers (1)
- Riggers and roustabouts (1)
- Stationary engineers (1)

Footnote (1) Workers in these groups do not need to be trained if their work or the work of those they supervise does not bring them or the employees they supervise close enough to exposed parts of electric circuits operating at 50 volts or more to ground for a hazard to exist.

How often – Initially and as required thereafter

References: OSHA 1910.301-399 and OSHA 1926.400-449

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## Ergonomics

This section focuses on measures needed to avoid or minimize activities, which may lead to injuries that develop gradually as the result of repeated stresses on a particular part of the body (cumulative trauma disorders).

### Purpose

The purpose of ergonomics awareness training is to prevent and/or minimize the risk of employees developing cumulative trauma disorders.

### Policy

- All County employees shall be aware of and use proper body mechanics and posture at all times. Administrative, engineering and work practice controls, as well as personal protective equipment shall be utilized to prevent cumulative trauma disorders.
- Avoid eye strain from computer monitors by taking periodic breaks, changing screen angles, keeping dust off screen, and/or using anti-glare screens or tinted glasses.
- Use proper sitting posture to avoid lower back strain; keep back straight, sit toward the back of the chair for support, have knees slightly higher than the waist, and keep feet flat on the floor or have a foot rest. Avoid twisting at the waist; turn your whole body instead.
- Adjust keyboard height and keep arms at right angle to avoid wrist strain.

### Responsibility

All County employees whose jobs require repetitive, forceful, or awkward movements are included.

### Training

Who will be trained: - Employees who work at a computer for an extensive period of time; employees who do considerable lifting, twisting or turning, and/or who uses the hands, arms or shoulders in a forceful repetitive manner.

How often – Initially and as required thereafter.

Content - Training should be targeted toward the job. Topics may include carpal tunnel syndrome prevention, reducing back injuries, and proper body mechanics.

Who provides - Individual departments

References: OSHA Act of 1970, Section 5, General Duty Clause

## **Food Safety Policy**

The safety of Horry County employees is of the utmost importance in all aspects of our work. On occasion employees are required to participate in operations that necessitate consumption of meals provided by Horry County during operations. When an emergency situation arises and personnel are being fed at work, improper food handling could drastically diminish our readiness and have devastating results on our ability to perform. This policy has been developed to provide specific guidance on food products served in the workplace.

1. During day-to-day operations, employees shall assume all risk in consumption of food that is delivered, donated, or otherwise provided to them by any source.
2. During emergency operations when employees are provided with food by the employer, employees shall not consume food products donated by sources other than those approved by management. Department heads may approve donated items for their own departments.
  - a. EOC personnel that coordinate food service providers during emergency/contingency operations shall assure credentials (DHEC License) of food service providers.
  - b. All approved food service providers shall follow DHEC regulations concerning the preparation, transport, storage, handling, and dispensing of food items.
  - c. Perishable foods donations shall be accepted only from sources that are licensed by SC DHEC.
3. Food provided to employees by Horry County shall be consumed immediately at the serving site, and should not be taken from the premises for later consumption to ensure safety of employees. If taken from premises, individual assumes food safety responsibility and all liability.
4. Foods transported to the field for distribution shall be handled according to DHEC guidelines (maintain temperature).
5. Left-over food items shall be stored immediately after serving to prevent growth of bacteria or spoilage according to DHEC regulations, or disposed of according to USDA guidelines.
6. Special events and fundraisers:
  - a. All food services during special events and “fundraisers” sponsored by Horry County or held on county property shall require appropriate DHEC License and Liability Insurance Coverage.
  - b. All “fundraisers” conducted by Horry County employees must meet DHEC guidelines and have approval from the County Administrator or designee. All items requiring preparation shall be prepared and packaged for distribution in a licensed facility prior to sale or dissemination.

7. All county operated food services must comply with DHEC licensing, Business licensing, and Hospitality tax regulations as applicable.
8. This policy **does not apply to:** pre-packaged, non-perishable items such as canned sodas, bottled water, chips, cookies etc., bake sales, or foods brought from home for personal consumption.
9. Department heads shall notify Maintenance Department prior to events that will be serving food products to ensure proper waste product and food disposal in line with DHEC requirements.

## Grounds Maintenance Safety

This section covers policies for the safe operation of grounds maintenance equipment operated by all departments.

Ground keeping equipment – equipment such as, but not limited to lawnmower, lawn and garden tractors, leaf blowers, shredders, chain saws, weed-eaters, compost mills and tillers used to maintain lawns, gardens, walks and drives.

### Policy

1. No employee shall operate ground maintenance equipment without training.
2. Employee shall wear personal protective equipment (PPE) as required by the equipment manufacturer.
3. Employees must be at least 18 years old to operate power driven machinery.
4. Shut off equipment and remove the key and/or pull the spark plug wire before performing maintenance.
5. Shut off equipment and allow hot engines to cool before refueling.
6. Avoid placing any part of the body in front of a discharge chute. Do not allow discharge to point at people or property as objects can be thrown at high velocity causing death, injury and damages.
7. Remove any debris from area to be cut that might be thrown prior to operating mowers.
8. All guards and shields must be in place during operation.
9. Durable labels shall legibly identify all positions of an operating control.
10. After hitting a foreign object, an engine or motor shall be stopped and inspection made.
11. Inspect equipment daily or prior to use.
12. Roll-Over Protection Systems (ROPS) must be used if equipped. Seat belt must be worn in addition to ROPS to protect operator.
13. If ROPS must be lowered to clear low hanging branches, do not wear seat belt while it is lowered. Once mowing beneath obstacles is completed then ROPS must be raised and seat belt worn.
14. Never operate engines in an enclosed area.

### Push Lawn mowers:

1. Avoid pulling the mower backward to prevent injury to the feet.
2. A mower shall be moved across the face of a slope more than 17 degrees, never up and down, except by the use of a rope to raise and lower the mower while standing at the top of the slope.

### Riding Mowers

1. Mower blades shall not be engaged unless the employee is seated on the mower.
2. Riding mowers shall not be operated up or down a slope of more than 26 degrees or move across the face of a slope of more than 17 degrees.

### Brush Saws and Weed Whackers

1. Head should rotate freely and be free from objects when started.
2. The user shall maintain two - hand control of equipment and wear shoulder harness if provided.

#### Edge Trimmers

1. The cutting blade of an edge trimmer shall be covered with a guard to prevent foreign objects from being discharged into the operator's area or at an angle of 15 degrees from the ground.

#### Rotary Tillers

1. The tine area shall be operated or shielded to prevent debris or other objects from being thrown.
2. Operator shall maintain control of the tiller.

#### Chain Saws

1. Carry with the top handle and with the guide bar to the rear.
2. Should not be used above shoulder height of the operator.
3. Protective chaps shall be worn at all times.
4. Never drop start a chain saw.
5. Use extra care when starting power saws on elevated working surfaces.
6. PPE required includes steel toe footwear, chaps, hard hat, safety glasses or shield, and hearing protection.
7. Blade shall be guarded while in storage.

Responsibility: All County employees who use powered grounds-keeping equipment in the course of their duties and their supervisors.

#### Training

Who may be trained: All employees who use powered ground-keeping equipment and their supervisors.

How often: Before initial assignment and as needed thereafter

Who provides: Supervisor or designee

References: OSHA 1910.243, 1910.266, 1926.302c, 1926.602, 1926.604, 1926.1001, 1928.51, Operator manuals

## Hand and Portable Power Tools

This section provides for the maintenance, operation and use of hand and portable power tools around and about the workplace.

Hand tools - an instrument used or operated by muscle power.

Power tool - an instrument powered by electricity, air, hydraulic, water, or explosive means.

**Purpose:** The purpose of this policy is to ensure the safety of personnel and to maintain safe and reliable tools in the workplace.

**Policy:**

1. Employee shall receive training on the safe and proper use of hand and portable power tools before use.
2. Employee shall inspect tools, including electrical cords, before each use to make sure they are in safe operating condition.
3. All electrically powered tools must have approved grounds or be double insulated.
4. Ground fault circuit interrupters must be used if working with a 2-wire system.
5. Ground fault circuit interrupters must be used on construction sites.
6. Employees should not wear loose clothing that might become entangled in the power tools. All jewelry should be removed. Long hair should be properly secured to avoid entanglement.
7. Employees must use personal protective equipment as indicated in the equipment operator manual, and as required by the hazards associated with the job.
8. Employees must use the guarding devices and safety features of the tools as provided.

**Responsibility** All County workers (full time, part time and temporary) who use hand and/or power tools and their supervisors.

**Training:**

Who shall be trained - All employees who use hand and power tools and their supervisors

How often: Before first use of tools and as needed

Content - How to safely and effectively use hand tools, portable power tools, powder-actuated tools, gas-powered tools, chain falls, hot sticks, and wood working machinery

Who provides - Individual departments

**References:**

OSHA 1910.242, 243, 244

OSHA 1926.300 - 306

Operator manuals



## Heavy Equipment Safety

This section covers policies for the safe operation of heavy equipment.

Heavy equipment – equipment such as, but not limited to tractors, motor graders, backhoes, and bulldozers.

Purpose: To eliminate potential for injuries to employees and the public.

Policy:

- No employee shall operate a piece of heavy equipment without training.
- The employee shall wear the proper personal protective equipment (PPE) as required for the job.
- Employees should be at least 18 years old to operate power driven machinery.
- Shut off equipment and remove the key before refueling.
- Avoid placing any part of the body in front of a discharge chute or in the direction that discharge will go.
- Remove debris from the area to be worked on.
- Keep all guards and shields in place.
- Maintain beacon light on while operating equipment.
- Durable labels shall legibly identify all positions of an operating control.
- After hitting a foreign object, engine or motor shall be stopped and inspection made.
- Inspect equipment prior to use.
- Scan the rear before backing when spotter is not available on roadways.
- Face the equipment when mounting and dismounting. Do not jump from the equipment.
- Employees shall mount and dismount equipment using the “three point method”. Using both hands and feet, three points of contact shall be maintained until fully mounted or dismounted.
- Maintain required clearances with overhead power lines at all times.
- Do not conduct soil disturbance activities without first locating all buried utilities.
- Do not check for hydraulic leaks with hands, high pressure fluid injection can cause death or require amputation of affected body parts.

### Heavy Mowers

- Mower blades shall not be engaged unless the employee is seated on the mower.
- Mowers shall not be operated up or down a slope of more than 26 degrees or move across the face of a slope of more than 17 degrees.
- PPE required includes steel toe footwear, safety glasses, seat belt, and hearing protection.

Responsibility: All County employees who operate heavy equipment in the course of their duties and their supervisors.

## Training

Who may be trained - All employees who use heavy equipment and their supervisors

How often – During orientation, and as needed

Content - operating procedures, hazards, safeguards, and use of PPE

Who provides - Supervisor or designee

Resources – -Equipment manuals.

Reference        OSHA General Industry Standards 1910.180  
                      OSHA Construction Industry Standards 1926.550, 602, 1000  
                      OSHA Occupational Safety & Health Standards for Agriculture 1928

## Ladder Safety

This section covers the care and safe use of ladders in the workplace.

Definitions:

Type IA ladder – Industrial ladder, Capacity 300 lbs. Max

Type I ladder – Heavy ladder, 250 lbs. Max

Type II ladder – Medium ladder, 225 lbs. Used for medium duty, such as used by painters, offices, and light industries

Type III ladder – Light ladder, 200 lbs. Max

Pitch – Rise over run; the included angle between the horizontal and the ladder, measured on the opposite side of the ladder from the climbing side.

Extension ladder – A non-self-supporting portable ladder adjustable in length, consisting of 2 or more sections traveling in guides allowing adjustment of length.

Platform ladder – A self-supporting stepladder with a platform provided at the working level.

Purpose: To assure that ladders are safe and used in a safe manner.

Policy/Procedures

- Ladders shall be inspected before use. Those with broken or missing rungs or steps, broken or split side rails or other defects shall be tagged and removed from service.
- Portable ladders shall be placed on a portable base at a 4/1 pitch, have clear access at top and bottom, extend a minimum of 3 feet above a landing, and be secured against movement. Extension ladders should have safety feet.
- Employees shall not stand on the top 3 rungs or within 3' of the top of the extension ladder. The top 3 steps on an extension ladder shall not be used.
- Only one person shall be on any ladder at one time unless the ladder is specifically designated for more than one person.
- Ladders shall not be used as scaffold platforms unless designed for that purpose.
- Stepladders shall be opened fully with its spreaders out.
- A stepladder shall not be used as a straight ladder.
- The user shall not stand on the top step of a stepladder, as recommended by manufacturer.
- Only type IA, I, and II stepladders and platforms shall be used.
- When carrying objects up a ladder, at least one hand should be used to maintain balance and security.

Ladders shall bear a permanent mark or label including the manufacturer's name, year of manufacture, ladder grade and certification and compliance with American Standard Association standard for the type of ladder used. Fixed ladders, including manhole steps, shall be designed, constructed and maintained free from recognized hazards and in compliance with SCOSHA general industry standard.

Responsibility: All employees who use ladders and their supervisors.

Training:

Who will be trained – All employees who use ladders.

How often – Initially and as required thereafter.

Content – Types, safe use, maintenance, inspection, and repair.

Who provides – Affected departments

Resources – SCOSHA Voluntary Program and County Safety Library

References            SCOSHA General Industry Standard 1910.27  
                             SCOSHA Construction Industry Standard 1926.1053

## Office Safety

This section covers basic common-sense considerations in an office setting.

Purpose: To promote safe work practices in the office setting.

Policy:

Each Department Head will assess his/her department at least monthly for any safety hazards and have them corrected. Assessment should follow the general guidelines listed below. Offices are allowed to create and implement individual office safety procedures to use along with these guidelines.

- All areas should be kept free of any tripping hazards such as telephone cords, extension cords, foot stools, open file drawers, paper boxes or cartons, furniture and fixtures.
- Spills should be wiped up immediately to prevent slips/falls.
- Material should be stored on shelves in a manner to prevent falling. Heavy objects should be placed on lower shelves. Stack boxes no higher than four (4) feet.
- Keep 32 inches of clearance in front of all electrical panel boxes.
- Proper lifting and carrying techniques shall be used at all times. Be sure you can see over a load you are carrying.
- Broken glass should be cleaned up immediately without direct contact with the hand and disposed of in a manner so as not to create an additional hazard.
- Handrails shall be used when descending stairs to prevent falls. Handrail use when climbing stairs can also prevent injury if you stumble. Do not skip steps on stairs.
- No running, turn corners slowly, be prepared to meet someone with arms loaded with files.
- File cabinets should be securely placed and only one drawer pulled out at a time. Fill new cabinets from the bottom up and never overload top drawers. Do not leave drawer open.
- Do not use chairs as step stools. Push in chairs when leaving work area. Do not sit on the edge of a chair or tilt chair back.
- Do not use boxes, furniture, chairs, or other makeshift platforms to reach objects. Use a ladder or step stool designed for that purpose.
- Care should be taken when carrying and storing pointed objects, such as pencils, pens, knives or scissors.
- Do not overload electrical circuits. Do not place electrical cords under carpet. Look for frayed, bare or improperly grounded wires and faulty appliances and report them immediately.
- Coffeepots and other appliances shall be turned off when not in use.
- Know the correct operating procedures for office equipment.
- Avoid eye contact with photocopier light. Avoid physical contact with toner.
- Paper cutters should have a guard and be kept locked when not in use.

- Do not burn candles in offices or any County facilities.
- Employees should report any damaged flooring that may cause falls.
- Employees should know the location of first aid kits.
- Each office should post an evacuation plan. This plan should be in visible areas throughout the office area.

Responsibility: All County employees who work in offices and their supervisors.

Training:

Who may be trained: All employees.

How often: At orientation to the job, and other times as needed.

Who provides: Department Head

Reference            OSHA General Industry Standards 1910  
                             OSHA Construction Industry Standards 1926

## **Personal Protective Equipment**

This section covers the policy on the use of personal protective equipment (PPE).

**Purpose:** To assure that employees have and use the proper PPE to protect themselves from hazards on the job.

**Policy:**

Departments will provide the appropriate personal protective equipment and training on its use to protect their employees from the hazards of their job duties.

Supervisors will conduct an assessment of the hazards of each job position they supervise, specify the PPE required and certify in writing that the workplace hazard assessment has been performed.

Personal protective equipment shall not be used as a substitute for engineering (design), work practice and/or administrative controls. PPE shall be used only in conjunction with these controls.

### Face-Eye Protection:

- All face and eye protection, including safety glasses with side shields, welding helmets, face shields, and goggles, purchased before July 5, 1994 shall comply with Z87.1-1968 ANSI standard (USA Standard for Occupational and Educational Eye and Face Protection). Face and eye protection purchased after July 5, 1994 shall comply with Z87.1-1989 ANSI standard (American National Standard Practice for Occupational and Educational Eye and Face Protection).
- Face-eye protection shall be used when a hazard or risk of injury exists from flying objects or particles, harmful contacts and exposure such as glare, light flashes, liquids and injurious radiation.
- Face-eye protection shall be kept clean, in good repair and fit snugly without interfering with movement.
- Affected departments will provide to employees with corrective lenses, one pair of prescription safety glasses or a pair of goggles to fit over lenses no more than once a year unless the PPE provided is broken or severely damaged in the course of employment.
- Welding helmets and hand shields shall be designed to protect the face, eyes, ears, and neck against radiant energy and spatter resulting from arc welding. The shade of the lens shall be appropriate to the job being done while welding.

### Electrical Protective Equipment:

- Rubber insulated gloves, mats, blankets, covers, line hoses, and sleeves shall be ANSI/ASTM approved.
- PPE shall be given a visual and electrical test at least once a year, and visual inspection before each use.
- Equipment should be maintained in a safe, reliable condition.
- PPE must be capable of withstanding the voltage being worked on.

### Personal Clothing:

Clothing should be suitable for work being performed; as determined by the supervisor.

### Head Protection:

- Head protection shall be worn for all work that involves overhead lifting equipment, underground excavations, and when personnel or equipment are working or suspended above the employee.
- Head protection shall meet Z-89.1-1969 or Z-89.2-1971 ANSI standards and be appropriate for the job being done.
- All head protection shall be checked before each use to make sure it is in a safe condition. Head protection that is damaged will be replaced. Equipment should be stored in a clean-dry area to avoid temperature extremes and direct sunlight.

### Foot Protection:

Supervisors of affected departments shall specify the type of foot protection needed when engaged in the activities listed below but not limited to the following:

- ⇒ Grounds maintenance activities involving the use of mowers, trimmers, and other power equipment.
- ⇒ Construction inspection, testing and surveying.
- ⇒ Traffic sign handling and fabrication.
- ⇒ Equipment repair, servicing and tear down.
- ⇒ Handling any heavy objects or heavy equipment.
- ⇒ Working around any fixed equipment.
- ⇒ Emergency services.
- ⇒ Other related activities.
- ⇒ Departments shall provide the cost of the safety shoes required for regular full-time and regular part-time employees. Temporary employees are responsible for the purchase of and maintenance of foot protection when needed.
- ⇒ Safety footwear shall meet Z41-1991 ANSI standards.
- ⇒ Foot protection shall be maintained without holes due to wear, rips, or tears that reduce the intended protection.

### Overall Body Protection:

Appropriate overall body protection shall be used when the torso or legs are subject to heat, splashes from hot metals, liquids, impacts, cuts, infectious material, acids or radiation.



Working Over or Near Water:

Employee's shall wear a U.S. Coast Guard approved life jacket or vest when working over or near water or the possibility of drowning exists. The jacket shall be of the type that will roll the wearer face up if unconscious. The jacket or vest will be visually inspected for damage before each use. A ring buoy or approved similar device with at least 90 feet of safety line should be readily available for rescue operations and within 200 feet of the water.

Reflective Safety Vests:

Affected departments will provide all employees involved in construction and traffic work with approved safety vests (reflective type) to be worn in accordance with the following guidelines:

- Any employee working on any street or railroad right of way, or where heavy equipment is being used shall wear an approved safety vest. This will include day or night work.
- All vests shall be securely tied, not loose fitting, and worn on the outside of all other garments.
- Police and Fire Departments shall be governed by their own standard operating procedures regarding safety vests.
- Uniforms that meet or exceed the effectiveness of the reflective safety vest will be considered an acceptable substitute for the safety vest.

Hand Protection:

The appropriate gloves shall be used to protect hands from burns, cuts, abrasions, electrical shock, amputations, infections, and absorption of chemicals. Defective or damaged gloves shall be replaced.

Fall Protection: Harnesses and Other Safety Equipment

- Shall be inspected before each use and stored in a dry area.
- When working more than **six (6) feet** above or below ground level, a safety harness shall be worn and connected to a lifeline, unless on a ladder or guarded work surface.
- A lifeline shall support 5400 pounds. It must be connected to a fixed object that will support a 5400 pound dead weight load.
- Body belts for fall arrest are prohibited.
- Other types of protection may include guardrails that withstand 200 pounds of impact and safety nets.
- The Fire/Rescue and Police Departments shall be governed by their own standard operating procedures regarding fall protection while performing emergency services.

Hearing Protection: Covered in "Hearing Conservation." section

Responsibility	All County Employees
Training	<p><u>Who shall be trained</u> - All applicable county employees</p> <p><u>How often</u> - At initial employment and annually thereafter</p> <p><u>Content</u> - When PPE is required, what type is necessary, how PPE is to be worn and its limitations, proper care, maintenance, useful life and disposal</p> <p><u>Who provides</u> – Departments; Risk Management will provide training upon request.</p>
Reference	<p>SCOSHA General Industry Standards 1910</p> <p>SCOSHA Construction Industry Standards 1926</p>

## Powered Industrial Trucks

This section pertains to powered industrial trucks, also known as forklifts, tow tractors, tow tugs, motorized pallet trucks, electric narrow aisle lifts, and rough terrain forklifts.

“Powered Industrial Truck” - A mobile power-propelled truck used to carry, push, pull, lift, stack or tier materials. Powered industrial trucks can be ridden or controlled by a walking operator. Earth moving and over the road haulage trucks are not included in the definition. Equipment that was designed to move earth but has been modified to accept forks are also not included.

Purpose: The purpose of this policy is to ensure the safety of employees operating powered industrial trucks.

### Policy

1. Equipment shall be inspected daily or by each new operator that uses it throughout the day.
2. Parking on inclines, wheels shall be chocked, parking brake set, and steering wheel turned toward the curb.
3. Maximum load requirements must be observed and not exceeded.
4. Operator must be aware of overhead electrical wires and other obstructions.
5. Forks must be spread as far apart as load will permit.
6. Load must be completely on forks, balanced and secure.
7. Forklifts must be stopped completely before raising or lowering load.
8. Forks must be in the lowered position when moving with or without a load.
9. Modifications and additions to forklifts shall not be made without prior written approval from manufacturer.
10. If the truck is equipped with front-end attachments other than factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered.
11. The user shall see that all nameplates and markings are in place and are maintained in a legible condition.
12. Department Heads shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in OSHA 1910.178(l).
13. No person may operate a powered industrial truck (except for training purposes), prior to successful completion of required training.
14. Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely.
15. An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years. No person may operate a powered industrial truck that is overdue evaluation.

16. The employer shall certify that each operator has been trained and evaluated. The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation.
17. Only approved industrial trucks shall be used in hazardous locations.
18. When ascending or descending grades loaded trucks shall be driven with the load upgrade, this is to prevent loads from falling off forks.
19. If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.
20. Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.
21. When personnel work platforms are attached to the forklift, the rules for Aerial Work platforms must be followed.

#### Responsibility

All levels of supervision and operators of power operated Industrial Trucks.

#### Training

Who should be trained - All employees who use powered industrial trucks, also known as forklifts, tow tractors, tow tugs, motorized pallet trucks, electric narrow aisle lifts, and rough terrain forklifts must be trained and licensed.

How often – Every 3 years (as required by OSHA).

Who provides – Department Heads are responsible for ensuring personnel receive training. The supervisors of County employees who work with powered industrial trucks are to insure that they are properly trained for their duties and have sufficient knowledge of the applicable OSHA standards

Resources – OSHA 1910.178 and OSHA 1926.602

## Scaffolds

This section pertains to scaffolds and other elevated work platforms: also known as forklift baskets, scissor lifts, or any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel.

Purpose: To ensure the safety of employees operating or working from elevated work platforms.

Definitions: Scaffold – An elevated work platform for supporting employees and materials, which is temporary in nature.

Policy:

1. Specific procedures are required for the numerous types of scaffolds; please see 1910-28 and 1926-451 for each type of scaffold, or go to:  
*<http://www.osha.gov/SLTC/etools/scaffolding/index.html>*
2. Prior to use, scaffolding must be visually checked for defects.
3. The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.
4. Scaffolds 10' or higher above the floor or ground shall have standard barriers and toe boards. If the scaffolding is over an aisle, walk or work area, the sides shall be screened with half-inch mesh from toe board to top rail when others might work or pass under the scaffold.
5. Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.
6. A minimum distance of 10' must be maintained from power lines of 50 KVA or less.
7. Employees shall not work on scaffolds during storms or high winds (25 mph),
8. Employees shall not work on scaffolds which are covered with ice or snow, unless all ice or snow is removed and planking sanded to prevent slipping.
9. Scaffolds shall not be moved until all personnel, loose tools, materials and equipment have been removed from the platform.
10. Tools, materials, and debris shall not be allowed to accumulate in quantities to cause a hazard.
11. All tubular welded frame scaffolds shall be erected by competent and experienced personnel.

Responsibility: All employees who use scaffolds and their supervisors.

Training:

Who shall be trained – All employees who use scaffolds.

How often – Initially and as required due to new equipment, retraining or lack of knowledge.

Content – Safety principles for the construction, use and maintenance of the scaffolds.

Who provides – Affected departments.

References: OSHA 1910.28 and OSHA 1926.451

## Temperature Extremes: Heat and Cold

This section covers recommendations for safely working in conditions of extreme heat or cold.

Purpose: To assure that employees know and follow steps to prevent heat stress and hypothermia when working in extreme temperatures.

Definitions:

Hypothermia: Condition of reduced body temperature.

Heat stress: Relative amount of heat stress from the environment.

Heat stroke: A serious disorder resulting from exposure to excess heat. It results from sweat suppression and increased storage of body heat. Symptoms include dry pale skin (with no sweating) or hot red skin and high temperature, mental confusion, convulsions, collapse and coma. It can be fatal if not treated immediately.

Heat exhaustion: A condition caused by loss of body water because of exposure to excess heat. Symptoms include headache, tiredness, nausea, and sometimes fainting. If actions are not taken to treat heat exhaustion, the illness could progress to heat stroke and possible death.

Heat cramps: Painful muscle spasms caused by exposure to excess heat.

Policy/Guidelines:

### Guidelines for Working in Extreme Heat

- Allow your body time to adjust to the heat before overdoing it. Generally this takes about a week. Help workers adjust to the heat by assigning a light workload and longer rest periods for the first five to seven days of intense heat. This process needs to start all over again when a worker returns from vacation or a long period of leave.
- Schedule heavy work for the cooler part of the day if feasible.
- Use the buddy system; work in pairs to safely monitor response to extreme heat.
- Provide cold water for workers. Drink water frequently - at least 8 ounces every 15 - 20 minutes when working in the heat even if you don't feel thirsty. Avoid alcohol, coffee, tea and caffeinated soft drinks that dehydrate the body.
- Wear "breathable", lightweight, light-colored, loose fabrics such as cotton. Change your clothes if they get completely saturated.
- Use general ventilation and spot cooling at points of high heat production by moving into the shade or using fans whenever possible. Good airflow increases evaporation and cooling of the skin.
- Take frequent, short breaks in cool shaded areas to allow your body to cool down.
- Avoid heavy meals that reduce your ability to get rid of heat by redirecting your blood flow to the digestive system instead of to the skin surface.
- Stick to cool (not hot) foods and beverages.
- Salt supplements aren't recommended unless you're being treated for heat disorder. The normal diet has plenty of salt in it.

- Consuming electrolyte replacement drinks (or "sports drinks") is *recommended when working in extreme heat for over 2 hours*.
- Be aware of the symptoms of heat stress disorders such as muscle cramps, fatigue, headache, dizziness, nausea, fainting, profuse sweating or NO sweating, hot or cool clammy skin, loss of coordination, weak and rapid pulse, and other symptoms. If any of these symptoms occur, take immediate steps to cool off and rehydrate the victim by moving the person to a cool, shaded area to rest. Don't leave the person alone. If the person is dizzy or light headed, lay the person on their back and raise the legs about 6 – 8 inches. If the person is sick to their stomach lay them on their side. Loosen or remove clothing. Have person drink a small cup of cool water every 15 minutes if they are not feeling sick to their stomach. Try to cool the person by fanning them. Cool the skin with a cool spray mist of water or wet cloth. If the person does not feel better in a few minutes, call **911** for emergency help.

#### Guidelines for Working in Extreme Cold

- Be aware of the symptoms of cold stress or "hypothermia" such as uncontrollable shivering, weakness, drowsiness, disorientation, slurred speech, and unconsciousness.
- Use the buddy system; work in pairs to safely monitor response to extreme cold.
- Dress in layers of clothing so you can adjust what you're wearing to suit the temperature. Wear polypropylene or lightweight wool next to the skin to allow sweat and moisture to wick away from the skin.
- Wear outer garments made of wind resistant material such as nylon.
- Since a lot of body heat escapes through the head, wear a hat for added protection.
- Be aware of the symptoms: cold stress or "hypothermia" such as uncontrollable shivering, weakness, drowsiness, disorientation, slurred speech, and unconsciousness. If any of these symptoms occur, take immediate steps to warm the victim by moving the person to a warmer, heated place. If the person does not feel better in a few minutes, call **911** for emergency help.

Responsibility: All employees working in temperature extremes.

Training:

Who shall be trained: All employees who are exposed to temperature extremes.

How often – Seasonally and as needed.

Content - Types of heat and cold disorders, how to prevent heat stress and hypothermia, recognizing symptoms, and treatment.

Responsibility – Department

Who provides - Affected departments

Resources – County Safety Library (Risk Management)

References            OSHA training aids and General Duty Clause

## Traffic Safety in Work Zones

This section covers policies for traffic control during all operations in the roadway or right of ways.

**Purpose:** To assure safety of the worker and motorist, maintain efficient flow of traffic through work zones, and comply with state and federal *Manual of Uniform Traffic Control Devices*.

**Policy:**

Any time the normal use of a roadway or right-of-way area is suspended; temporary traffic control planning shall provide signage and devices to assure a safe work zone and a safe, efficient path for traffic to follow. Plans and devices shall follow the principles set forth in Part VI of the federal *Manual for Uniform Traffic Control Devices*.

When a street needs to be closed to through-traffic, **911** will be notified.

Public bodies have a common law and court imposed legal duty to warn motorist of hazards. Highway agencies should not assume that the roads are used only by alert, intelligent, and cautious drivers. Work zone warnings should be designed and maintained as sufficiently “forgiving” to accommodate the majority of drivers.

All flagging operations shall have the appropriate signing, equipment, and trained personnel. All essential signs, including the “Flagger Ahead” signs, in advance of each flagger station shall be installed. Flaggers shall remain alert and carry out their duty with authority and dignity. All flaggers shall be provided with a STOP/SLOW paddle in good condition, a reflective safety vest, and wear a brightly colored hat or hard hat. Only in emergencies should flags be used.

**Definitions:**

**Traffic control zone:** The total area affected by the work being performed.

**Advance warning area:** The area where signs tell traffic what to expect ahead.

**Transition area:** The area where traffic is moved out of its normal path.

**Buffer area:** The area that provides a degree of protection for traffic and workers. This area should be sufficiently long to allow workers in the work area a degree of advance warning and protection from a vehicle that fails to heed warnings and could be entering the work area.

**Work area:** The area where workers, equipment and materials are located.

**Termination area:** The area where traffic is moved back into its normal driving areas and notified of the end of the affected area.

**Warning signs:** Construction and maintenance warning signs are normally diamond shaped, having a black symbol or message on an orange background.



As a general rule their signs are located on the right-hand side of the street or highway. They are generally 48” by 48”.

**Responsibility:** All County employees who work in streets or right-of-way areas and supervisors of these employees.

**Training:**

Who should be trained - All employees that work in traffic safety zones, including department heads, supervisors, laborers, and temporary employees.

How often – Initially; with regular on-site follow-up, reinforcement and feedback.

Content - Training should be appropriate to the job employees fill.

**Reference:** *Manual on Uniform Traffic Control Devices*, (MUTCD)

## Trailers

This section covers policies on the use of trailers and towing operations.

**Purpose:** To reduce the possibility of accidents, claims, and injuries to employees and the public we serve; all departments shall require employees to operate trailers with lights in an operational condition during towing operations regardless of whether it is day or night.

**Policy/Guidelines:**

All departments will comply with South Carolina Code of Laws and Horry County policy when operating trailers in the performance of their duties. Horry County policy is as follows:

- Trailer lights shall be connected and inspected for proper operation before towing begins. All lights shall be in operation while trailer is being towed.
- Tire pressures and condition shall be assessed before operating the tow vehicle or trailer to prevent blow-outs and possible loss of control
- Wheel bearings should be maintained according to manufacturer specifications
- Tow vehicle and trailer brakes shall be inspected, serviced, and maintained in good working order.
- Towing connections shall be inspected prior to operation and at intervals throughout the day to ensure no loose components are present
- Break-away chains/devices/brakes shall be used; hooks shall be equipped with latches.
- On every trailer weighing 3000 pounds gross or less (gross= weight of trailer and load); the tow vehicle must weigh at least 2 ½ times the trailer weight, OR a braking system is required on trailer.
- If the trailer exceeds 3000 lbs gross, the same requirements above must be met AND the ADDITIONAL requirements; the trailer must be equipped with brakes acting on all wheels, and must have a break-away braking system.

**Responsibility:** All employees and supervisors conducting or supervising towing operations.

**Training:**

Who: All employees that tow trailers.

How often: Initially and as needed.

Content: Manufacturer provided materials

Who Provides: Departments.

**Reference:** SC Title 56

## **Welding and Cutting**

This section covers policies on the safe use of welding and cutting tools.

**Purpose:** To assure that employees performing welding and cutting operations do so in a safe manner to protect themselves, other workers and County property.

**Policy/Guidelines:**

Employees involved in welding and cutting operations will adhere to general safety requirements as follows:

- Welding and cutting shall be performed only by properly trained employees wearing approved personal protective equipment (PPE).
- Precautions shall be taken to prevent sparks, flames, molten slag and hot metal from coming in contact with people and combustible materials.
- Suitable fire extinguishing equipment shall be immediately available when welding and/or cutting equipment is used.
- A friction lighter shall be used to light fuel gas cutting or welding torches.
- When lighting a torch, open the fuel gas valve before opening the oxygen valve.
- Employees shall not leave a rod in the electrode holder when they lay it down.
- All regulators, hoses and torches shall be stored in a ventilated area.
- Warning signs shall be posted where welding or cutting is taking place **ABOVE OTHER WORK AREAS.**
- In gaseous or dusty spaces where there is a potential for an explosion, welding or cutting equipment shall not be used until the space is tested and adequately vented.
- Combustible material must be 35' from hot work or be covered with a fire resistant covering.
- Adequate ventilation of the worker's breathing zone shall be maintained at all times or an approved respirator shall be worn.
- All equipment/work areas shall be inspected before and after each use.

**Responsibility:** All employees performing welding operations and their supervisors.

**Training:**

Who: All employees who use arc and/or gas welding or cutting equipment.

How often: Initially and as needed

Who Provides: Departments.

VII. Reference      OSHA General Industry Standards 1910.252-255  
                             OSHA Construction Industry Standards 1926.350-35

## **WORKPLACE VIOLENCE POLICY**

The Government of Horry County is committed to providing, in so far as it reasonably can do so within available resources, a safe environment for working and conducting business. The County will not tolerate acts of violence committed by or against County employees, or members of the public, while on Horry County property or while performing Horry County business at other locations.

### **The word violence in this policy shall mean an act or behavior that:**

- Is physically assaultive.
- A reasonable person would perceive as obsessively directed, e.g., intensely focused on a grudge, grievance, or romantic interest in another person, and reasonably likely to result in harm or threats of harm to persons or property.
- Consists of a communicated or reasonably perceived threat to harm another individual or in any way endanger the safety of an individual.
- Would be interpreted by a reasonable person as carrying potential for physical harm to the individual.
- Is a behavior, or action, that a reasonable person would perceive as menacing.
- Involves carrying or displaying weapons, destroying property, or throwing objects in a manner reasonably perceived to be threatening.
- Consists of a communicated or reasonably perceived threat to destroy property.

Violent actions on County property or facilities, or while on County business, will not be tolerated or ignored. Any unlawful violent actions committed by employees or members of the public while on County property, or while using County facilities, will be prosecuted as appropriate. The County intends to use reasonable legal, managerial, administrative, and disciplinary procedures to secure the workplace from violence and to reasonably protect employees and members of the public.

### **Policy Goals and Objectives**

The objective of this policy is to achieve the following:

- Reduce the potential for violence in and around the workplace.
- Encourage and foster a work environment that is characterized by respect and healthy conflict resolution.
- Mitigate the negative consequences for employees who experience or encounter violence in their work lives.

## **Possession and use of Dangerous Weapons by Employees**

Prohibition: In the interest of maintaining a workplace that is safe and free of violence, except as hereinafter provided, possession or use of dangerous weapons is prohibited on County Property, in County Vehicles or in any personal vehicle which is used by County business.

Dangerous Weapons Defined: A dangerous weapon is any instrument capable of producing bodily harm, in a manner or under circumstances, and at a time and place that manifests intent to harm or intimidate another person or that warrants alarm for the safety of another person. Dangerous weapons are further defined by South Carolina State Statute Code 16-23-405.

### **Exception to Dangerous Weapons Prohibitions**

Employees of Horry County may possess a firearm on County Property if:

- Engaged in military or law enforcement activities.
- Legally in possession of a firearm for which the employee holds a valid permit and said firearm is secured within an attended personal vehicle or concealed from view within a locked unattended personal vehicle while that person is working on County property.
- Pocket knives are allowed in all areas other than those designated as off-limits by court requirements, prison regulations, or other directives.

### **Responsibilities:**

Employees:

All employees are responsible for: Refraining from acts of violence and for seeking assistance to resolve personal issues that may lead to acts of violence in the workplace; and reporting to managers and supervisors any dangerous or threatening situations that occur in the workplace.

Employees are encouraged to report to their managers/supervisors, situations that occur outside of the workplace which may affect workplace safety, i.e., instances where protection orders have been issued, etc.

Managers/Supervisors

Managers and supervisors are responsible for assessing situations, making judgments on the appropriate response, and then responding to report of or knowledge of violence and for initiating the investigation process.

Evaluate reports of violence immediately. Take appropriate action where possible in order to protect the employee from further violence. Where issues of employee safety are of concern, managers and supervisors should evaluate the workplace and make appropriate recommendations regarding a reasonable response.

### **The County Administrator**

In so far as is reasonably possible, the County Administrator or his/her designee is responsible for developing procedures that are designed to reasonably achieve:

- Prompt and appropriate response to any act of violence.
- Accountability among employees for acts for violence committed in the workplace.
- Establishment of oversight of investigations of violence.
- Establishment of a crisis management team to provide immediate response to serious incidents.
- Establishment of avenues of support for employees who experience violence; and communication of this policy and administrative procedures to employees, managers and supervisors.

### **Achieving Goals and Evaluating Progress**

To achieve the goals and objectives of this policy, the County intends to do the following:

- Establish procedures and methods for implementing policies and for addressing violence in the workplace.
- Provide training to managers, supervisors, and other employees.
- Evaluate the physical environment for safety, consider modifications; and evaluate progress in achieving the goals and objectives of this policy.

### **When a Violent act occurs:**

If the act or altercation constitutes an emergency, **CALL 911**. In instances that are not emergency situations, contact your immediate manager or supervisor after contacting **911**. If possible, separate the parties involved in the violent altercation. If the parties cannot be separated, or it would be too dangerous to the employee or manager to attempt to separate the parties, **CALL 911**.

Contact the appropriate Department Director. The Department Director will contact the Assistant County Administrator's who will assist with coordinating response to the incident as necessary. In instances that involve emergency situations, or criminal activity, **CALL 911**.

Incidents involving emergency situations and/or criminal activity will be referred to the Police Department for assessment and, if necessary, investigation. In instances when it is not appropriate to refer an incident to the Police Department, the Human Resources Director will evaluate the situation and make a recommendation regarding the need for an investigation. If an internal investigation is recommended, the Human Resources Director will coordinate the investigation process.

## **Conducting an Investigation**

Incidents involving emergency and/or criminal activity will be referred to the Police Department for investigation. The Human Resources Department will handle incidents that do not involve an emergency situation, and/or criminal activity. The Human Resources Director, in consultation with the County Administrators office, will determine whether an investigation is needed and who will conduct the investigation.

Data Collection:

There are great liabilities and legal implications associated with violent behavior in the workplace, therefore, before beginning any investigation, consult with higher management and the Human Resources Department.

The investigation could lead to disciplinary action; be sensitive to the rights of all persons involved and proceed in a manner that demonstrates objectivity, fairness and a concern for confidentiality. Remember; document all aspects of the investigation.

## **Accurate Accounts of the Incident**

Obtain the Date/Time of the violent incident.

Find answers to the questions: Who, What, When and Where.

Find out what specifically happened in this and any other incidents.

Determine the background of the situation, including the relationship between the parties before the incident.

Obtain the Names of anyone else whom: Saw or heard the incident or the person has talked with about the incident.

Obtain names of anyone believed to have had encounters with the alleged offender.

Find out what the person did in response to the violent encounter.

Find out whether the person has documented the incident, or any other violent encounters that the person has had with the alleged offender.

Reassure the person that the County is actively responding to the incident and that any retaliation will not be tolerated.

### **Interview with the Alleged Offender**

Approach the interview in a non-judgmental, sensitive manner. Keep in mind that a person is innocent until proven at fault. Unreasonable assumptions of guilt before an investigation has been completed can impede an appropriate investigation.

- Present the incident or incidents described by the victim or your own observations if you directly saw the incident.
- Get the alleged offender's side of the story.
- Investigate with such questions as:
  - "Describe the incident that occurred between you and the victim."
  - "Describe your relationship with the victim and other interactions that you have had."
- Listen attentively as the alleged offender talks.
- Advise the offender of the seriousness of any form of retaliation against the recipient/victim, or any action that might be interpreted as retaliation.

### **Interview with observers or others in the Workplace**

In your investigation, realize that observers may also be disturbed by the violent interaction they have witnessed.

Investigate with questions such as: What type of interaction did you observe between the offender and victim? Are there others who might be able to comment, or who observed the same incident?



**Chapter 2 - Appendix A**  
**Horry County Driver Improvement Program**  
**Defensive Driver Training Application for Department**

**Purpose:**

Horry County recognizes that accidents are too costly. An adequate driver training program shall be implemented to prevent or reduce accidents. Prevention is the best solution for minimizing losses, reducing bodily injuries and the number of accidents involving vehicle use. Department Heads are responsible for ensuring their personnel receive required training.

**Who Must Participate:**

All employees and volunteers that operate County vehicles must participate in the County's driver improvement program, use defensive driving skills, be alert to traffic conditions while driving, and obey all applicable traffic laws. Risk Management will maintain a master list of attendees that completed the training.

- Department Heads are to maintain a record and schedule their employees for training as required.
- Operators must take the 4-hour refresher course by **every fourth (4th year)**, or more often if supervisor or department head deems appropriate.
- Risk Manager may recommend to County Administrator or designee that employees that do not meet required training have their driving privilege of county vehicles suspended.
- The Risk Manager must approve all driver-training courses under this program and will have authority to recommend changes to the Driver Improvement Program as needed.

**Chapter 2 - Appendix A**  
**Horry County Driver Improvement Program**  
**Defensive Driver Training Application for Department**

**Requesting Department:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Whereas**, this department is requesting to establish its Driver **Refresher** Training or has a Driver **Refresher** Training Program that equals or exceeds training requirements of the AAA Driver Improvement Program that is used for countywide training.

**Whereas**, this department agrees to comply with the following additional requirements.

1. Include with application a detailed outline of the department driver training course.
2. Cover all topics in the countywide driver training program.
3. Cover accident trends that are identified by department or Risk Management loss reports to reduce losses and maintain an attitude of safe practices toward driving.
4. Submit to Risk Management within 14 days of the course by email a spreadsheet of employees completing department driver training, date completed and course name.

Department Head Signature: \_\_\_\_\_

Print Dept. Head Name: \_\_\_\_\_

Risk Manager Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_ Approved \_\_ Denied

Optional:  
County Administrator Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_ Approved \_\_ Denied  
Or Assistant County Administrator

Chapter 2 – Appendix B

**Use of Portable Electric Space Heaters**

**Portable space heaters are not permitted in Horry County facilities. These devices create an over-load condition of electrical systems, can create an imminent fire hazard and they keep the heat and cooling system from performing efficiently for you and others.**

**Exception:**

Approvals for use in any facility are for temporary use from November 1<sup>st</sup> – March 31<sup>st</sup> and only after the following conditions are met. Each employee shall comply with these conditions to ensure safe, acceptable, and cost efficient operations.

**Conditions**

1. Portable electric space heaters (except heat mats) **shall not be used in a room or cubical that has a thermostat or temperature sensor.**
  2. Portable electric space heaters shall bear a UL listing label.
  3. Portable electric space heaters shall not have worn or damaged electrical cords, and the plugs shall be in good condition.
  4. Portable electric space heaters shall contain a mechanism whereby the heater shuts off automatically if tipped over.
  5. Portable electric space heaters shall be plugged directly into an electrical outlet. The use of any extension cord is strictly prohibited.
  6. Portable electric space heaters shall be turned off and unplugged when not in use, and at the end of each business day.
  7. Portable electric space heaters shall be placed a minimum of three (3) feet from any combustible material (e.g. curtains, paper, cloth, etc) and in a well ventilated area.
  8. Portable electric space heaters shall not be placed underneath desks (except heat mats), in any means of egress (exit path), or any high traffic area.
- Department Heads whose departments have portable electric space heaters shall post these requirements in a visible, accessible area and may be responsible for repairs/replacements of any damages caused by the use of a portable space heater.
  - Users understand that space heaters are for temporary use and the County may at anytime disallow further use in County facilities to ensure safe, acceptable and cost efficient operations.

Date Posted \_\_\_\_\_ By \_\_\_\_\_

*CHAPTER – 3*

**EMPLOYEE EMERGENCY ACTION PLAN,  
FIRE PREVENTION PLAN,  
AND  
FIRE EXTINGUISHER PLAN**

*01 July 2012*

**EMPLOYEE EMERGENCY ACTION PLAN**

**POLICY**

Horry County is firmly committed to providing each of its employees a safe and healthy work environment. It is a matter of policy, as well as state and federal laws. Horry County has implemented this Employee Emergency Action Plan as outlined herein.

The Horry County Risk Management Staff will have the overall responsibility for managing and updating the Employee Emergency Action Plan for Horry County.

**PURPOSE**

To address emergency situations that may reasonably be encountered in the workplace and prepare employees through training and drills to handle these situations through preparedness. The overall intent of this plan is to ensure the personal safety of all employees in the work place.

**APPLICABILITY**

This policy applies to all employees of Horry County. Employees shall attend training in order to attain a thorough understanding of the Employee Emergency Action Plan. Employees shall abide by the requirements of this policy and the requirements of state and federal regulations. Employees that fail to meet these requirements shall be retrained, disciplined or terminated as needed. Maintaining a safe work environment is not optional.

**REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

**PROCEDURE**

The following procedures are intended to provide employees with guidance on how to deal with emergencies such as; fire, toxic chemical release, hurricanes, tornadoes, floods and other situations.

## **ALARM SIGNALS**

In case of emergency a verbal alarm shall be issued to other employees by shouting an alarm signal; example (FIRE! FIRE! FIRE!) All employees shall respond to this signal with seriousness.

Automatic alarms shall also be treated with seriousness and response shall be immediate. Personnel will evacuate to specified rally points as specified by department heads.

As in any emergency, notify 911 of the circumstances.

## **EMPLOYEE ESCAPE PROCEDURES (EVACUATION)**

At the time of an emergency, employees should understand what *type* of evacuation is necessary and what their role is in carrying out the plan. There are three basic evacuation plans.

- In some cases total and immediate evacuation of all employees is necessary.
- In other emergencies, an evacuation of nonessential employees is necessary with a delayed evacuation of others for continued operation or shut down.
- If a chemical spill, gas leak, or other critical emergency were to occur, it would probably require some form of civilian populace to evacuate. Reporting the emergency would be the first step employees must take by calling 911. After that notification of the general populace would be the responsibility of the emergency services personnel (Fire/Police).

Department heads shall designate rally points for their employees. Rally points may include parking lots, open fields or streets located away from the site of the emergency that provide sufficient space to accommodate the employees. Employees shall move away from the exit discharge doors of the building, and avoid congregating close to the building where they may hamper emergency operations. Personnel should evacuate to at least 300 feet from the structure.

Any individual may initiate an evacuation, including non-employees. Department supervisors need to ensure all employees present are notified of evacuation and ensure their office spaces are cleared as the evacuation is ordered.

Once an evacuation is ordered, all personnel should exit the structure in a calm and orderly fashion and proceed directly to the department's assigned rally point so that all personnel may be *accounted for*. During inclement weather, personnel will proceed to a refuge point after everyone is accounted for.

If any individual is missing, attempt to identify their location and notify emergency response personnel that an individual is unaccounted for and their last know location. Do not re-enter the building in an attempt to locate missing persons; that is a job for emergency responders.

Emergency escape routes shall be clearly identified and a color-coded floor plan shall be posted in each building showing occupants the routes to follow during emergency or evacuation and the rally point to meet at. These floor plans shall also show the location of fire extinguishers and emergency shutoffs or other vital equipment.

The designation of rally points to account for all personnel and refuge or safe areas for evacuation during inclement weather should be posted on the emergency egress route signs in each building, or briefed to all personnel.

## **DISABILITIES**

Each person has different skills and abilities. This reality calls for specific provisions for individuals with disabilities in the event of an emergency. The employee with a disability is responsible for informing her/his department administrator or immediate supervisor that she/he will require assistance during an evacuation. It is important not to assume that persons with obvious disabilities need assistance, or to assume what type of assistance they may need.

Persons with disabilities must study and remain aware of the features of each building they are in, including stairways, exits, phone locations, and elevator procedures. At times, assistance from others may be needed. Individuals with disabilities may seek assistance (escorts) from others in their work areas if emergency evacuation becomes necessary.

Department heads should discuss emergency procedures with individual employees who have obvious disabilities, those who have informed them of any special needs, and all newly hired disabled individuals. It must be determined what assistance they may need and how best to accommodate those needs. (For further information go to: [eeoc.gov/facts/evacuation.html](http://eeoc.gov/facts/evacuation.html))

## **SHUT-DOWN PROCEDURES**

Department heads shall develop and document emergency shutdown procedures for all equipment and each process within their departments. All personnel shall be trained in these procedures.

All departments shall perform normal shut down of unnecessary equipment, (computers, etc) at the end of each day and prior to leaving buildings to reduce risk of fire. In event of emergency these systems shall be shutdown if time permits.

## **RESCUE AND MEDICAL DUTIES**

Horry County employs a full time Fire department responsible for performing rescue and lifesaving duties. In addition many county employees have been trained to perform CPR.

All rescue duties shall fall upon the Fire Department, as they are the properly trained and equipped organization to handle these situations. However all personnel should be prepared to render assistance with injuries or to aid in rescue of persons in perilous conditions until they are relieved by fire/rescue personnel.

## **FIRE REPORTING PROCEDURES**

Report all fires by dialing 911 and give all details to an emergency operator.

## **FIRE FIGHTING PROCEDURES**

Employees that have been trained in firefighting procedures as part of their job (Fire fighters, torch operators, welders, dip tank operators, lab workers, etc.) shall use fire extinguishers as required by OSHA standards. All other employees are required to evacuate in the event of fire.

Employees shall attempt to extinguish only small fires in the incipient stage. All fires should be reported immediately by calling 911, even if it was small and was put out with an extinguisher.

## **SPECIFIC EMERGENCY PROCEDURES**

### **FIRE**

- Initiate fire alarm signal.
- Report fire by calling 911.
- Evacuate the building according to posted procedure and proceed to designated rally point and account for personnel.
- Employees that have received training may use portable fire extinguishers to control/extinguish the fire. However no employee shall attempt to isolate or extinguish a fire at the risk of endangering his/her own safety or the safety of others. Fight fire only in its incipient stages.
- All fires must be reported even if it was small and was put out with an extinguisher.
- Employees shall not re-enter an evacuated facility until cleared to do so by emergency response personnel.

### **BOMB THREAT**

- Attempt to keep caller on the line as long as possible while having another employee contact 911. Try to get as much information as possible from caller; bomb location, time of possible detonation, reason for threat. Also note any background noise that may assist Police in apprehending subject.
- Pass on any information received to the 911 operator.
- To err on the side of safety, anytime a bomb threat is communicated all employees will evacuate facilities immediately.
- Remain alert at all times to suspicious packages or persons around or in county facilities. In event of a bomb threat take note of anything out of place and communicate this to emergency response personnel.
- Employees shall not re-enter facility until cleared to do so by emergency response personnel.

### **OPERATIONAL EMERGENCIES**

- Reduce or shutdown operations to address problem.
- Secure/cease all hazardous chemical operations.

### **SUICIDE THREAT**

- Attempt to keep individual calm and talking, while having another employee contact 911 or local security.
- Do not attempt to disarm persons with weapons.
- Do not challenge individual or put yourself in a position to become a hostage.
- Retreat from area and evacuate facility if possible, without placing evacuees in danger (bomb or weapons.)



## **CHEMICAL SPILL OR RELEASE**

- Call 911 and initiate notification that a spill or release has occurred. Also notify the 911 operator if the spill/release cannot be contained/stopped, and if the spill/release poses a threat to the surrounding community
- If spill can be contained or stopped through remote means attempt to control or stop it.
- If necessary evacuate the building according to posted procedure and proceed to the designated rally point and account for personnel.
- Employees shall not re-enter facility until cleared to do so by emergency response personnel.

## **WEATHER EMERGENCIES**

- In the event of a severe weather notification, (Tornado, Hurricane, Ice Storm) the county will be expected to serve the community in preparation, during the event, and after it has passed. Normal withdrawal to shelters is not standard procedure for many county employees since they will serve in the emergency command post, as emergency responders, and in other functions. However the following is standard procedure to be followed by all employees not acting in an emergency capacity:
  - Remain indoors and limit travel to emergency only.
  - Remain in the strongest part of the facility, away from windows if storm contains high winds.
  - If advance warning is received, move all loose equipment into shelters and take precautions to limit the possible damage/loss/destruction of equipment and facilities.
  - Watch for downed power lines, do not attempt to move wires, report all hazardous situations to the Emergency Operations Center or the utility owner.
  - During icing conditions, snow, or heavy rain reduce vehicle speeds and use extended following distances and stopping distances. Vehicle lights and flashers shall be used while driving County vehicles during adverse weather.

## **FIRE PREVENTION PLAN**

### **WORKPLACE FIRE HAZARDS**

Fire hazards faced by employees throughout the county are numerous and vary by location. The primary fire hazards faced by county employees are paper products, fuel, and electrical equipment.

### **RESPONSIBLE PERSONNEL**

Department Heads are responsible for:

- maintenance of equipment and systems to prevent or control ignition or fires
- controlling fuel source hazards and storage of flammables/combustibles
- ensuring personnel are trained to operate fire extinguishers per policy
- posting evacuation route signs
- training employees in the use of fire extinguishers if required for duties.

### **HOUSEKEEPING PROCEDURES**

Department Heads are responsible for controlling the accumulation of flammable and combustible waste materials. These materials should be eliminated completely or stored in a way that they pose no risk of fire.

### **TRAINING**

The Department Head shall ensure the fire prevention plan is trained annually along with fire extinguisher training. Employees shall be informed of the fire hazards of the materials and processes to which they are exposed.

## **FIRE EXTINGUISHER PLAN**

### **POLICY**

It is the policy of Horry County to provide a safe work place for all employees. This is primarily achieved by the prevention of accidents and incidents that could impact health and safety. This Fire Extinguisher policy has been developed to provide a rapid first response to small fires. This response can protect both employees and facilities against significant injury or damage.

### **PURPOSE**

Horry County provides fire extinguishers in all facilities to enable trained employees to control and extinguish small fires. Extinguishers are to be placed in compliance with regulations.

### **APPLICATION**

This program applies to all facilities and to all employees who have been trained to properly use a fire extinguisher.

### **REGULATION**

OSHA 29 CFR 1910.157

### **PROCEDURE**

### **SELECTION AND DISTRIBUTION**

Horry County selects and distributes portable fire extinguishers throughout the facilities based upon the following criteria:

<b>TYPE EXTINGUISHERS <u>AND USE</u></b>	<b>MAXIMUM DISTANCE</b>
Class A - Class A fire - Ordinary combustible materials such as paper, wood, cloth and some rubber and plastic materials	75
Class B - Class B fire - Flammable or combustible liquids, flammable gases, greases and similar materials and some rubber and plastic materials	50
Class C - Class C fire - Energized electrical equipment requiring the use of electrically non-conducting extinguishing media	Based on A and B patterns
Class D - Class D fire - Combustible metals such as magnesium, titanium, zirconium, sodium, lithium and potassium	75

Fire extinguisher placement, (locations) are indicated on the emergency evacuation plan for each facility.

The selection and location of all fire extinguishers are to be reviewed annually by the Horry County Fire Marshall/Code Enforcement.

## **INSPECTION, MAINTENANCE AND TESTING**

Fire extinguishers are to be visually inspected monthly by each department. This inspection is the responsibility of the Department Head. Fire extinguishers located in public areas will be inspected by maintenance department personnel.

The visual inspection will consist of inspecting for proper pressure (typically in the green area of the gauge), the presence of all components and the lack of visible external damage to any components.

Monthly inspection of fire extinguishers shall be documented on the fire extinguisher tag. Any fire extinguisher found defective will be noted on the form, taken out of service, and be immediately reported to Maintenance Department for buildings, Fleet Maintenance for vehicles.

Replacement extinguishers shall be obtained immediately to replace any extinguisher removed from service.

An annual maintenance inspection is to be conducted on each fire extinguisher per OSHA requirements. These inspections are to be conducted by a certified outside contract firm. Completion of annual inspections shall be the responsibility of Maintenance Department for buildings, Fleet Maintenance for vehicles.

Annual inspection records will be maintained by the contracted inspection agency.

Stored pressure dry chemical extinguishers that require a 12-year hydrostatic test will be emptied and subjected to applicable maintenance procedures every 6 years. The 6-year cycle begins from the date of hydrostatic testing or recharging.

## HYDROSTATIC TESTING

All hydrostatic testing is to be performed by a qualified fire extinguisher company per OSHA requirements.

The testing will be conducted according to the intervals set below:

<u>TYPE OF EXTINGUISHER</u>	<u>TEST INTERVAL (YRS)</u>
<b><u>Soda Ash (Stainless Steel Shell)</u></b>	<b><u>5</u></b>
<u>Cartridge operated water and/or antifreeze</u>	<u>5</u>
<u>Stored water pressure and/or antifreeze</u>	<u>5</u>
<u>Wetting agent</u>	<u>5</u>
<u>Foam (Stainless Steel Shell)</u>	<u>5</u>
<u>Aqueous Film Forming Foam (AFFF)</u>	<u>5</u>
<u>Loaded stream</u>	<u>5</u>
<u>Dry Chemical with stainless steel</u>	<u>5</u>
<u>Carbon Dioxide</u>	<u>5</u>
<u>Dry chemical, stored pressure with mild steel, brazed brass or aluminum shells</u>	<u>12</u>
<u>Dry chemical, cartridge or cylinder operated, with mild steel shells</u>	<u>12</u>
<u>Halon 1211</u>	<u>12</u>
<u>Halon 1301</u>	<u>12</u>
<u>Dry powder, cartridge or cylinder operated, with mild steel shells</u>	<u>12</u>

Testing will also be conducted if one or more of the following conditions exist:

- If the unit has been repaired by soldering, welding, brazing or the use of patching compounds.
- When the cylinder or shell treads are damaged.
- When there is corrosion that has caused pitting, including corrosion under removable nameplate assemblies.
- When calcium chloride extinguishing agent has been used in a stainless steel shell.

Testing will also occur if there is any new evidence of corrosion or mechanical damage to an extinguisher.

In addition to external visual examination, an internal examination of cylinders and shell will be made prior to hydraulic testing.

Testing will be performed on extinguisher hose assemblies that are equipped with shut-off nozzles at the discharge end of the hose. The test interval will be the same as the extinguisher.

Extinguisher shells, cylinder, or cartridges that fail a hydrostatic pressure test are to be removed from service.

Records are kept of all hydrostatic testing results by tags on each extinguisher, showing that the extinguishers were tested in accordance with the schedule on page 3.

The record will consist of the date of the test, the signature of the tester, and the identification number of each extinguisher. These records will be kept at least until the next hydrostatic test or when the extinguisher comes out of service, whichever comes first.

Hydrostatic testing methods and procedures are to be performed according to information and methods found in 29 CFR 1910.157 (f).

## **TRAINING AND EDUCATION**

Employees that perform tasks such as fire fighter, welder, dip tank operator, lab technicians will be educated on the general principles of fire extinguishers and the general hazards of incipient stage fire fighting.

This training will be provided upon initial employment using "hands on" methods, and at least annually thereafter, by Horry County Fire Rescue.

## **CHAPTER – 4**

### **HAZARD COMMUNICATION PROGRAM**

*01 July, 2012*

#### **Hazard Communication Program**

##### **POLICY**

Horry County is firmly committed to providing each of its employees a safe and healthy work environment. It is a matter of county policy, as well as state and federal laws. Horry County has implemented this Hazard Communication Program as outlined herein.

Horry County Risk Management will have the overall responsibility for managing and updating the Hazard Communication program for Horry County.

##### **PURPOSE**

Federal and State regulations require that hazards of all chemicals produced or imported into the workplace are evaluated and that information concerning their hazards is transmitted to employees through hazard communication programs. Employers are not required to evaluate chemicals if they have chosen to rely on the evaluation performed by the chemical manufacturer. Horry County will utilize the manufacturer developed chemical evaluation and Material Safety Data Sheets (MSDS), or letter stating hazards from manufacturer if no MSDS is available.

##### **APPLICABILITY**

This policy applies to all employees of Horry County. Employees shall attend training in order to attain a thorough understanding of the Hazard Communication Program. Employees shall abide by the requirements of this policy and the requirements of state and federal regulations. Employees that fail to meet these requirements will be retrained or disciplined as needed. Maintaining a safe work environment is not optional.

##### **REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

## **PROCEDURE**

### **Access to the Written Program**

Each Department shall make this written Hazard Communication Program available to employees or their designated representatives. The Horry County, Safety Manager shall make this policy available to the Assistant Secretary of Labor or SC Dept. of Labor for Occupational Safety and Health Act (OSHA) and the Director of the National Institute for Occupational Safety and Health (NIOSH) for review and copying upon request.

**Material Safety Data Sheets (MSDS)** Each department head will be responsible for obtaining Material Safety Data Sheets with each order and/or delivery of chemicals in their department. They will also be responsible for review of incoming data sheets for new and significant health/safety information. They will see that any new information is passed on to the affected employees. All employees receiving new chemicals into the workplace are responsible for forwarding the new MSDS sheets to the department head or designee prior to use of the chemical for update, filing, and employee notification and training.

MSDS's will be available to all employees in their work area (in notebooks) for review during each work shift. Employees working at more than one geographic location may obtain this information at their primary workplace facility. When employees report directly to the field without stopping by the office, MSDS's must be kept in the work-truck for ready availability. In an emergency MSDS's are available by calling the applicable department head. If MSDS's are not available or new chemicals do not have MSDS's, contact the department head at once and do not use/discontinue use of the chemical immediately.

### **Chemical Inventory**

Each department head is responsible for conducting an annual inventory of all hazardous materials in the department. The inventory will consist of the following information for each material: name, location, normal amount on hand, and availability of MSDS sheets. Any unlabeled material will be labeled immediately and its use will not be permitted until it is identified and properly labeled. The form in Attachment 2 will be used to conduct the inventory. A complete list of all workplace chemicals shall be posted in each department's MSDS book.

### **Container Labeling**

Each department head will verify that all containers are:

- Clearly labeled as to their contents;
- Have the appropriate hazard warning
- List the name and address of the manufacturer

The department head will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or a generic label noting chemical identity and appropriate hazard warnings. The department head will also ensure that all pipes in the workplace are labeled properly.



Stationary process containers will use signs, placards, process sheets, batch tickets, operating procedures or other written materials in place of labels as long as the chemical content is identified and appropriate hazard noted. In these cases, copies of the original label or MSDS will be immediately available to employees throughout the work shift, either by being posted or maintained by the department head.

## **EMPLOYEE EDUCATION AND TRAINING**

The department head is responsible for the employee-training program. They will ensure that all elements specified below are carried out.

Prior to starting work, and/or prior to the introduction of a new chemical in the workplace; each affected employee will receive a briefing by their department head or designee on the following:

- An overview of the Hazard Communication Standard
- Chemicals present in the workplace and in operations
- Physical and health effects of the hazardous chemicals
- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area
- How to prevent or lessen exposure to these hazardous chemicals through use of control/work practices, personal protective equipment, and good personal hygiene practices
- Emergency procedures to follow if they are exposed to these chemicals or if there is a chemical spill
- Hazard of chemicals in unlabeled pipes
- Personnel Protection Equipment (PPE) required
- Steps Horry County has taken to prevent or decrease exposure to these chemicals
- Hazardous Non-routine Tasks
- Location and availability of the written Hazard Communication Program
- Location of MSDS file and hazardous chemical list
- Description of labeling program
- How to read labels and review MSDSs to obtain appropriate hazard information

Training will be documented. Each employee will sign an attendance sheet to verify that they attended training, and understand the County's policies on hazard communication. This document must be maintained by each department and must be presented on request to indicate completion of training.

**HAZARDOUS NON-ROUTINE TASKS**

Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their supervisor about hazardous chemicals to which they may be exposed during such activity. This information will include:

- Specific chemical hazards
- Protective/safety measures the employee will take to prevent exposure
- Measures Horry County has taken to lessen the hazards including ventilation, respirators, presence of another employee, and emergency procedures.

Examples of non-routine tasks performed by the employees of this department are:

**Task**

**Hazardous Chemicals**

***Confined Space Entry***

***Possible toxic gases/Vapors***

**INFORMING CONTRACTORS: (including temporary employees)**

It is the responsibility of each *department head* to provide contractors and temporary employees with the following information:

The contractor shall be given a briefing and shown the list of all hazardous chemicals to which contract employees may be exposed while on the job site; additionally, the contractor and all employees shall be given access to MSDS's during normal shift hours. After normal shift hours a copy will be made available by the department head if needed.

The contractor and employees shall be briefed on precautions the contract employees should take to protect themselves during normal operating conditions and foreseeable emergencies.

It is the responsibility of each department head to ensure that *contractors* have provided Horry County with the information regarding chemical hazards that the contractor will bring into the workplace, such as;

- Hazardous chemicals to which employees of Horry County may be exposed while the contractor is on the job
- Precautions the employees of Horry County may take to lessen the possibility of exposure by usage of appropriate protective measures.

The department head who the contractors are working for will also ensure that contractors have provided the necessary training to their employees and that the employees understand the labeling used in the facility.

The department head who the contractors are working for will be responsible for working with each contractor regarding material safety data sheets (MSDS) for the materials which will be on site for the duration of time the contractor is on site. Copies of the MSDSs will be made available to all personnel and they will be kept in a central location for the duration of time the contractor is on site.

The department head who the contractors are working for will be responsible for gathering and disseminating any information concerning chemical hazards that the contractor is bringing to the workplace.

# Appendix A

## CHEMICAL INVENTORY FORM

DATE: \_\_\_\_\_ DEPARTMENT: \_\_\_\_\_

#	MATERIAL	QUANTITY	MSDS ON HAND
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
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## CHAPTER 5

### BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

*01 July, 2012*

**POLICY:** Horry County Government is firmly committed to provide a safe and healthy environment for all its employees and visitors. This Exposure Control Plan is a further indication of this commitment.

**PURPOSE:** The Occupational Safety and Health Administration (OSHA) promulgated a new standard on December 6, 1991, entitled "Occupational Exposure to Bloodborne Pathogens". The purpose of this plan is to limit occupational exposure to blood and other potentially infectious materials, since exposure could result in transmission of bloodborne pathogens and lead to disease or death.

**APPLICABILITY:** The OSHA standard covers all employees who could be "reasonably anticipated", as the result of performing their job duties, to have contact with blood and other potentially infectious materials. OSHA has not attempted to list all occupations where exposure could occur. It leaves this task to the employer. "Good Samaritan" acts, such as assisting a coworker with a nosebleed, would not be considered occupational exposure.

**REFERENCE:** This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

**SCHEDULE AND METHOD OF IMPLEMENTATION:** This plan and all changes that have been incorporated are placed in effect on 01 July 2010. All sections of 1910.1030 that are applicable to Horry County shall be implemented, by management and all affected employees effective on 01 July 2010.

**SOLICITATION:** In August 2010, the Safety Manager met with HCFR personnel during in-service training and with Sharon Jordan, HCFR Medical Training Officer. All HCFR EMT's, EMTI's and Paramedics were solicited (via e-mail) for inputs from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls. 6 employees responded via email, and the predominate input was a request for duck-bill masks with safety shield attached. This request has been turned over to HCFR for review.

## **DESIGNATED MEDICAL PROVIDER / EXPOSURE CONTROL PROGRAM**

Horry County has contracted with Doctors Care **843-444-2901 (OFFICE)** as our primary source for evaluation of all occupational exposures to Bloodborne Pathogens and Infectious Disease. The Doctors Care Infectious Control Nurse will be contacted immediately when an exposure has taken place at **843-957-7871 (cell)**. Doctors Care will advise the patient on where to report for evaluation, testing, treatment and for records disposition.

Doctors Care will ensure that treatment is provided following current CDC/OSHA guidance, and with current prophylaxis.

Doctors Care will maintain all OSHA required documentation of exposure, evaluation, treatment, immunization, and declination forms for employees. Copies of documentation of immunizations, declination forms, and physician's reports shall be forwarded to the applicable department for filing in medical records. Documents must be maintained for period of employment plus 30 years. Documents shall be returned to Horry County upon request, or if Doctors Care is unable to maintain files for any reason.

### **EXPOSURE CONTROL PROGRAM COORDINATOR:**

The Safety Manager, acting as the Exposure Control Program Coordinator, shall have overall responsibility for the Exposure Control Plan in compliance with OSHA's *Occupational Exposure to Bloodborne Pathogens* standard. The Program Coordinator has the full support of the Horry County Administrator to ensure compliance with the OSHA Bloodborne Pathogens standard is maintained.

Horry County complies with this standard by determining exposure risks of personnel, implementing an exposure control program, providing Hepatitis B vaccinations at no cost to our employees, and providing extensive training in the form of lecture, written material and videotapes.

The Exposure Control Plan delineates the OSHA standard as it applies to Hepatitis, AIDS transmissions and other bloodborne pathogens, the use of protective clothing, safe work practices and/or vaccination protocol.

The department head is ultimately responsible for individuals under his/her supervision. Proper instruction and supervision is essential to the elimination of risks to the worker.

The worker, with daily contact to potentially infectious agents, has a responsibility to remain informed and follow the guidance outlined in the Exposure Control Plan.

**INFECTIOUS MATERIAL DEFINED:** Infectious material includes: human blood, human blood components, products made from human blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, amniotic fluid, saliva in dental procedures, body fluid visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. They also include any unfixed tissue or organ other than intact skin from a human (living or dead), human immunodeficiency virus (HIV)-containing cells or tissue cultures, organ cultures, HIV or Hepatitis B (HBV)-containing culture medium or other solutions, as well as blood, organs or other tissues from experimental animals infected with HIV or HBV.

**EXPOSURE CONTROL PLAN DEFINED:** The standard calls for the creation of an exposure control plan that is designed to identify in writing, tasks and procedures, as well as job classifications where occupational exposure to blood or other potentially infectious materials occurs. This evaluation should be without regard to personal protective clothing and equipment. It must also set forth the schedule for implementing other provisions of the standard and specify the procedure for evaluating circumstances surrounding exposure incidents. The plan must be accessible to employees and available to OSHA. Employers must review and update it at least annually and more often, if necessary, to accommodate workplace changes. Changes shall also include a review by the designated medical provider.

**EXPOSURE DETERMINATION:** The OSHA standard requires that each employer prepare an exposure determination for its facility. This exposure determination will include all job classifications with potential exposures and all tasks and procedures where occupational exposure occurs and that are performed by employees listed in the at-risk job classifications.

*Jobs in which **all** employees have the greatest potential for occupational exposure to bloodborne pathogens:*

1. Fire Fighters	4. Detention Staff
2. EMS Personnel	5. Sheriff
3. Police Officers	6. Maintenance a: custodians b: plumbers

*Jobs in which **some** employees may have occupational exposure to bloodborne pathogens:*

1. Vehicle Maintenance	4. Administration Personnel
2. Parks & Recreation	5. Storm Water/Public Works
3. Library Staff	6. Contract Employees

*Tasks and procedures in which greatest potential for occupational exposure to bloodborne pathogen occurs in the job classifications listed:*

**Fire Fighter/EMS:**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Patient Handling	Body Fluid Contact	Examination Gloves
Patient Treatment	Needle Stick	Caution/Safety Needle
Decontamination	Body Fluid Contact	Examination Gloves

**Police Officer/Sheriff**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Restraining Suspects	Body Fluid Contact	Examination Gloves
Frisking Suspects	Needle Stick	Caution
Accident Investigation	Body Fluid Contact	Examination Gloves
Decontamination	Body Fluid Contact	Examination Gloves

**Detention Staff:**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Inmate Handling	Body Fluid Contact	Examination Gloves
Frisking Inmates	Needle Stick	Caution
Inmate Bites	Body Fluid Contact	Caution
Decontamination	Body Fluid Contact	Examination Gloves

**Maintenance Workers:**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Trash Collection	Body Fluid Contact/Needle Stick	Examination Gloves/Caution
Plumbing Repairs	Sewage Contact	Goggles, Rubber Gloves

**Vehicle Maintenance:**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Ambulance Repair	Body Fluid Contact, Cuts by contaminated metal surfaces	Examination Gloves and Leather Gloves

**All Others:**

<b><u>TASK</u></b>	<b><u>Hazard</u></b>	<b><u>Protective Measures</u></b>
CPR	Body Fluid Contact	Resuscitation Mask/Barrier
First Aid	Body Fluid Contact	Examination Gloves
Housekeeping	Body Fluid Contact	Examination Gloves



## **HEPATITIS TRANSMISSION:**

Hepatitis is a virulent infections disease, which claims an estimated 300,000 new cases every year. Over one million people in the U.S. are carriers of the disease. Hepatitis is transmitted to healthcare workers via blood and body fluids of infected patients, usually through accidental needle sticks and unprotected cuts and sores.

The CDC reports that Hepatitis is most prevalent among intravenous drug users sharing needles and through sexual contact among homosexually active males and female prostitutes. From these groups, it spreads to the community.

## **HEPATITIS SYMPTOMS AND PROTECTION:**

Hepatitis symptoms often include jaundice, a yellow hue to the skin, loss of appetite, nausea, and elevated liver function tests. AIDS and Hepatitis dangers can be prevented or reduced by:

- using protection against body fluids during at-risk procedures,
- using disinfectants to reduce pathogens in the environment,
- obtaining thorough patient medical histories,
- washing hands between patient treatment contacts,

OSHA enforces the CDC (Centers for Disease Control) recommendations. OSHA requires every healthcare worker, who may have any "occupational exposure" defined to include any skin, eye, mucous membrane or parenteral contact with potentially infectious materials on the job, be offered a Hepatitis B vaccination. The Hepatitis B vaccine can be obtained by contacting the Exposure Control coordinator, or your department head.

Any employee who refuses inoculation must sign an Informed Refusal Form (Appendix A).

## **AIDS TRANSMISSION:**

AIDS (HIV) is not as contagious in a healthcare or laboratory setting as Hepatitis; however, it has no vaccine for prevention. It is transmitted through body fluid; so healthcare workers are exposed to it. OSHA requires that employees be trained in prevention and be required to protect themselves during at-risk procedures.

AIDS is transmitted sexually through blood or semen. The CDC reports that it is most commonly seen in homosexual and bisexual men, IV drug users, and hemophiliacs. However, it is being reported with increasing frequency in the heterosexual community and in children born of HIV-infected mothers. AIDS is also transmitted through blood exposure or perinatally from the mother to the child. AIDS is not transmitted through general contact with a carrier.

Symptoms of HIV infection are varied and include: fatigue, fever, weight loss, night sweats, rashes, mouth sores, or pneumonia.

Because there is no inoculation against AIDS, The CDC recommends and OSHA requires that "Universal Precautions" be instituted in all healthcare or laboratory settings where the potential for HIV infection is present.

## **UNIVERSAL PRECAUTIONS:**

Under "Universal Precautions", the blood and body fluids of all patients are considered potentially infected with AIDS virus (HIV), Hepatitis B virus (HBV) and other bloodborne pathogens, and must be handled accordingly. This applies to blood and body fluids containing visible blood, including cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal and pericardial fluid and amniotic fluid. It does not include feces, nasal secretions, sputum, sweat, tears, urine, saliva, breast milk and vomitus, unless blood is present.

The amount of blood required to constitute an infectious risk has been variously defined by OSHA, EPA, and others as; "substantial", "dripping" and "significant". EPA has offered an objective definition that 15 milliliters of blood (about the size of three teaspoons), must be present to be of sufficient quantity to be infectious. This definition of quantity does not preclude the use of protective clothing; it only helps to define what constitutes infectious waste when disposing of blood-soaked materials. When differentiation is difficult, all bodily fluids shall be considered potentially infectious.

## **DEFINITIONS OF INFECTIOUS CONDITIONS:**

Infection needs four simultaneous conditions to exist. If you take any condition away, the danger from infection will be reduced or eliminated. The conditions, which must exist simultaneously, are:

- A sufficiently large dose to constitute a dangerous quantity.
- A sufficient virulence, or deadliness, to be dangerous.
- A portal of entry into a host, such as through an open cut or the nasal passages.
- A susceptible resistance level of the host. For instance, if a worker is tired, has the flu or a cold, the host is more susceptible to infection.

Removing any of the above conditions can reduce or prevent the likelihood of acquiring infectious diseases. For example:

- The use of gloves and masks will reduce/eliminate portals of entry.
- Regular hand washing and the use of disinfectants will remove or reduce the dose and virulence of the disease.
- The placement of sharps and needles into commercial sharps containers and the avoidance of recapping will reduce needle stick injuries.
- Getting plenty of rest and maintaining good physical conditioning.

## **ENGINEERING CONTROLS:**

Use devices engineered to prevent exposures when they are available.

Such devices include: puncture-resistant sharps containers, splash guards, and tongs for trash collection, biological safety cabinets, safety syringes, needle less IV systems, centrifuge safety cups and mechanical pipetting devices.

## **WORK PRACTICE CONTROLS:**

Work practice controls are those measures, which reduce the likelihood of exposure by altering the manner in which a task is performed. The following work practice controls shall be instituted for employees with occupational exposure on a daily or near daily basis to blood and other potentially infectious material:

### **Hand Washing**

Readily accessible hand-washing facilities shall be provided for employees.

When hand-washing facilities are not available, employees shall be provided with antiseptic towelettes or an antiseptic hand cleanser and clean cloth/paper towels. When these alternatives are used, employees shall wash their hands with soap and water as soon as feasible.

Hands and any other exposed skin surfaces must be washed with soap and running water and mucous membranes should be flushed with water as soon as possible after contact with blood or other potentially infectious material.

Hands must be washed as follows:

- whenever there is visible contamination with blood or body fluids;
- after completion of work;
- after removing gloves and between glove changes;
- before leaving the work area;
- before eating, drinking, smoking, applying cosmetics or lip balm, changing contact lenses;
- when using lavatory facilities;
- before all other activities which entail hand contact with mucous membranes, eyes or breaks in the skin.

### **PROTECTIVE CLOTHING AND EQUIPMENT:**

Personal protective equipment shall be provided by each department to employees when and where necessary. It is the responsibility of each employee and supervisor to be certain that the appropriate equipment is worn as necessary.

Additional equipment is available through your supervisor as follows:

Eyewear	Lab coats	Gloves
Aprons	Face shields	Respirators

Personal protective equipment shall be of safe design and construction, maintained in a sanitary condition, and stored in accessible locations in the facility.

Supervisors will provide protective clothing in locations where infectious wastes may be generated. The Exposure Control Coordinator will assist with selection of the appropriate protective clothing commensurate with the exposure risks in each area.

***The use of protective equipment is an OSHA requirement, therefore it is LAW.***

### **GLOVES:**

Three basic glove types are provided to employees:

- Leather Utility gloves for working with garbage and contaminated heavy equipment.
- Industrial strong latex/rubber gloves for maintenance, janitorial, and scrubbing work. These are reusable until they puncture, tear, or crack.
- Examination gloves for patient handling and first aid.

Examine gloves for physical defects before and after donning. Wear gloves whenever your hands might touch blood, body fluids, or surfaces that could be contaminated. Gloves should be discarded after working with each patient, or if you suspect possible contamination. If possible fit gloves so they cover the cuff of your clothing, to reduce the area of skin exposure.

Gloves must be used:

- If the skin of the employee is cut, abraded, chapped.
- When the employee's hands might contact blood or other potentially infectious material.
- When examining abraded or non-intact skin or patients with active bleeding.
- During invasive procedures.
- During housekeeping and cleaning involving body fluids and decontaminating procedures. Reusable heavy utility gloves should be used for these procedures.

Gloves must be of good quality vinyl, nitrile, or other acceptable product, able to perform the task, and fit properly. Surgical and examination gloves cannot be reused. Only general-purpose utility (rubber) gloves are reusable, i.e., those gloves worn by maintenance and housekeeping. Peeled, cracked, discolored, torn, or deteriorated gloves must be discarded, even if they have not been used. Never wear gloves that may have been exposed to infectious material outside of the laboratory or medical area, including corridors.

#### **PROTECTIVE EYEWEAR - GOGGLES:**

Goggles protect the eyes from splashing and fine mists of body fluids and harmful chemicals. The employee must wear goggles if a procedure presents a danger of splashing or if a manufacturer recommends that goggles be worn when using their product. Goggles are to be supplied by the supervisor.

#### **SURGICAL MASKS:**

Masks are worn if there is a likelihood of splashing or fine mist of blood or other infectious material. Masks reduce the entry of infectious droplets into the breathing passages.

#### **CARDIOPULMONARY RESUSCITATION MASKS:**

Employees whose tasks include participation in cardiopulmonary resuscitation (CPR) shall use a one-way mask when performing mouth-to-mouth resuscitation. Masks shall be provided and made readily available wherever the need for CPR may be reasonably expected to occur.

#### **STANDARD WORK PRACTICES:**

Assume that all blood or blood-related products are infectious. Follow Universal Precautions at all times.

- Wear personal protective equipment when handling blood or related products.
- Clean contaminated areas with a solution of 1 part Clorox in 10 parts water.
- Do not eat, drink, smoke, apply cosmetics or lip balm, or insert/remove contact lenses in areas where you could be exposed to blood or other potentially infectious materials.
- Dispose of infectious waste properly.

**HEPATITIS B VACCINE:**

HBV vaccine is provided free of charge by the county to all employees with potential for occupational exposure. The vaccine is administered by the designated health care provider (Doctors Care) in a 3-dose series given over a six-month period.

If an employee does not elect to take advantage of HBV immunization measures, the Department Exposure Control Program Coordinator must record this election on an "Informed Refusal" form (Appendix A) and, the employee must sign it. This form must be maintained in the departments medical files.

All new hires will be offered the vaccine within ten days of starting their "at risk" employment. All existing employees have been offered the vaccine. Any employee that has previously declined the vaccine may request to begin the vaccinations at any time in the future by contacting their supervisor or Department Exposure Control Program Coordinator.

All county employees that receive the HBV vaccinations and serve in jobs with potential for occupational exposure shall complete antibody titre testing approximately 2 months after completion of vaccinations. Personnel that have previously received HBV vaccinations will not need antibody titre testing per instruction of the Center for Disease Control. Titre testing for Fire, Law Enforcement, and Detention Center employees may be performed at their next in-service training (1-3 months) after completing HBV series.

**SHARPS:**

Employees must be aware of accidental needle stick injuries that can occur when handling waste materials, in apprehending or frisking suspects, and during Emergency Medical treatment.

If Sharps are discovered they should be handled carefully and placed in a clear plastic container (such as a Tupperware container or Coke bottle for safety) until a proper disposal container can be located. If you are unfamiliar with proper disposal requirements, contact the Safety Manager for information on proper disposal.

All needles shall be treated as contaminated. No needle shall be bent or recapped.

A sharps injury log entry (Appendix H) shall be completed in the event of a needle stick injury to an employee. This log shall be maintained at all times by Fire, Police, Sheriff, Detention, and Maintenance departments. All other departments shall initiate a Sharps Injury Log if an injury involving Sharps is experienced. The proper form is contained in Appendix H of this section. The Department Exposure Control Program Coordinator shall maintain all logs as required by law.

**INFECTIOUS WASTE:**

Federal and State regulations govern infectious waste disposal. Infectious waste should always be inactivated, if possible, either chemically or by autoclaving prior to disposal. If this is not possible, then the infectious waste should be sealed in a red plastic bag (NOT SHARPS) and disposed of in a regulated medical waste container.

**CONTAINING AND HANDLING REGULATED WASTE:**

All contaminated sharps and potentially contaminated sharps must be discarded immediately, or as soon as possible into containers which meet the following requirements:

- Closable and not able to be opened except by use of tools.
- Puncture-resistant.
- Leak-proof on bottom and sides to prevent leakage of contaminated liquids.
- Labeled using the universal biohazard symbol and the word "biohazard".
- When moving containers of contaminated sharps, the containers must be closed so that their contents do not spill or protrude.
- If leakage of the primary container is possible, it must be placed into a second container that is closable, labeled, and shall safely contain all contents without leaking.
- Reusable containers should not be opened, emptied, or cleaned manually or in any manner that would expose employees to the risk of injury.

**SPILLS:**

Spills may be soaked up using a BBP spill kit or with rags or any other readily available material.

**DISINFECTANTS:**

After the initial cleanup of a blood spill, 1 part Clorox in 10 parts water, or other commercially available suitable disinfectant, may be used to sanitize the affected area.

**HOUSEKEEPING:**

Clean and disinfect with a solution of at least 1 part Clorox in 10 parts water or equivalent disinfectant.

Clean exposed equipment and environmental surfaces after contact with blood and other infectious agents, as soon as possible to eliminate potential for exposure.

Broken glassware should never be picked up with unprotected hands and should always be treated as potentially contaminated. Mechanical means such as a brush and dustpan, tongs, or forceps should be used. These items should then be disposed of in a puncture-resistant container, as for contaminated sharps.

Place biohazard labels on sharps containers, infectious waste containers, refrigerators and holding media containing blood and other potentially infectious materials.

## **WARNING TAGS AND SIGNS:**

Warning tags must be used to prevent accidental injury or illness to employees who are exposed to equipment or operations that are hazardous and are unexpected, unusual, or not readily apparent. The tags must stay in place until the hazard is eliminated.

The tags must contain:

The Biohazard Symbol, that warns of the actual or potential presence of biological hazards. It must be displayed on equipment, containers and rooms that contain or are contaminated with hazardous biological agents.



A SIGNAL WORD: such as Biohazard. The signal word must be readable at a minimum distance of 5 feet. The warning tag must be affixed as close as safely possible to the hazard string, wire, or adhesive to prevent its loss or unintentional removal

And the MAJOR MESSAGE such as Blood Waste Products Inside. The major message of the warning tag must be understandable by all employees who may be exposed to the hazard. It can be a pictograph, written text, or both.

All employees in the workplace must be informed of the meaning of various tags in the workplace and what precautions to take.



## **RESPONSIBILITIES OF EMPLOYEES:**

- Attend annual training sessions on bloodborne pathogens in the workplace.
- Comply with all elements of the Exposure Control Plan that apply to work-related tasks and procedures with potential exposure, including the use of personal protective equipment and appropriate work practice controls.
- Report all exposure incidents to the work supervisor or other responsible individual immediately, or as soon as feasible, after they occur.

## **WHAT TO DO IN CASE OF HIV OR HBV EXPOSURE:**

If the exposure is the result of a needle stick or cut, encourage bleeding and wash immediately with soap and water.

The employee must ***immediately*** report the exposure incident to the supervisor. (Time is of the essence. results can often be improved by prompt action.)

The supervisor will ***immediately*** contact the Doctors Care Infectious Control Nurse when an exposure has taken place at 843-957-7871 (cell). Doctors Care will advise the patient on where to report for evaluation, testing, treatment and for records disposition. The Health Service Provider will evaluate and treat the individual based on guidelines set forth by the CDC and the OSHA standard.

The Occupational Health Service Provider will seek to identify and test the source patient for HIV and HBV infection. A consent form for HIV testing must be signed.

The employee's supervisor prepares an Exposure Incident Form (Appendix G) and an OSHA Form 101 on the event as follows. Additionally, the following information must be made available to the provider:

- The route(s) of exposure.
- The circumstances under which the exposure incident occurred.
- Identification and documentation of the source individual if possible; whenever possible, and with consent of the individual, the source should be tested to determine HIV and HBV status unless it is already known.
- The results of these tests shall be disclosed to the exposed employee but may not be otherwise disclosed to preserve the confidentiality of the source individual.

The physician evaluating the worker will determine if prophylaxis or medical treatment is indicated per CDC/OSHA guidelines. The employer does not have a specific right to know the actual results of the source individual's blood tests. The employer is however, responsible for providing results of any HBV testing previously completed.

## **EXPOSURE FOLLOW UP**

Horry County shall provide testing for all employees who have had an exposure incident, including any laboratory tests by an accredited laboratory at no cost to the employee.

Follow up must include a confidential medical evaluation which documents the circumstances of exposure, identifying and testing the source individual if feasible, testing the exposed employee's blood if he/she consents, post-exposure prophylaxis, and counseling and evaluation of the reported illnesses.

A written opinion to the employer by the physician will be provided, as required by the OSHA standard, and a confidential medical evaluation with a review of all the circumstances of exposure will be provided to the employee.

In the event a possible exposure "source" refuses blood testing, immediately contact Doctors Care at 843-957-7871 (cell). If the incident occurs after hours, dial the Doctors Care Infectious Control Nurse at 843-957-7871 (cell)

## **COLLECTION AND TESTING OF BLOOD FOR HIV/HBV STATUS:**

The testing of the exposed employee's blood shall be done as soon as feasible after obtaining consent. If the employee consents to baseline blood testing, but not to HIV testing, the samples must be stored and preserved for 90 days. If within that time the employee consents to further testing, it shall be done as soon as possible.

## **POST-EXPOSURE PROPHYLAXIS AND FOLLOW-UP**

Horry County shall arrange counseling for employees as part of the post-exposure treatment as well as medical evaluation of all reported illnesses following the exposure incident.

A written evaluation of the exposure incident shall be provided to the employee within 15 days of the completion of evaluation (see Appendix D).

## **INFORMATION AND TRAINING**

Each employee with occupational exposure to bloodborne pathogens will be provided with information and training as follows:

- At the time of initial assignment to tasks where exposure may take place,
- Within 90 days after the effective date of revised standards and
- At least annually thereafter.

Annual training for all employees shall be provided within one year of their previous training.

The Department Exposure Control Program Coordinator shall provide additional training when changes such as modifications of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

Material appropriate in content and vocabulary to educational level, literacy, and language of employees will be used.

The training program shall contain, at a minimum, the following elements:

- A copy of the standard and explanation of its contents.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of the County's Exposure Control Plan and the means by which employees can access a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices and personal protective equipment.
- Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.
- An explanation of the basis for selection of personal protective equipment.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination shall be offered free of charge.
- An explanation of the procedure to follow, if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- An explanation of the signs and labels required by the Exposure Control Plan.
- Opportunities for interactive questions and answers between the trainer and the employees.

The person conducting the training will be knowledgeable in the subject matter.

## **RECORDKEEPING:**

### **Medical Records**

Each department will establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29CFR 1910.1030. This record will include:

- The name and social security number of the employee.
- A copy of the employee's Hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required.
- A copy of all results of examinations, medical testing and follow-up procedures as required. (Actual medical records will be retained by the Occupational Health Service Provider.)
- The employer's copy of the healthcare professional's written opinion as required.
- A copy of the information provided to the healthcare professional as required.

### **Confidentiality:**

Each department will ensure that employee medical records required are:

- Kept confidential and are not disclosed or reported without the employee's expressed written consent to any person within or outside the workplace except as required by law.
- Maintained for at least the duration of employment plus 30 years in accordance with 20CFR 1910.20.

### **Training Records**

Each department shall include the following information in their training records:

- The dates of the training sessions
- The contents or a summary of the training sessions
- The names and qualifications of persons conducting the training
- The names and job titles of all persons attending the training sessions

Training records shall be maintained by each department for 3 years from the date on which the training occurred.

Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, to the OSHA director, and to the OSHA assistant secretary or South Carolina Department of Labor in accordance with 29CFR 1910.1030.

**REVISIONS:** The Horry County Bloodborne Pathogens Exposure Control Plan shall be reviewed annually by the Horry County Exposure Control Program Coordinator. Each department should review the plan annually and submit recommendations for inclusion or revision prior to June 1<sup>st</sup> of each year.

**ADDITIONS:** Each department may add to the written plan with policies and procedures in the form of addendums to the basic plan, but these addendums must meet the minimum OSHA requirements as outlined in 1910.1030, and may not detract from the County Exposure Control Plan. Forms may be altered to include department letterhead or any other changes but these changes must meet the minimum OSHA requirements as outlined in 1910.1030. Electronic files/forms are permitted but must be available as required by OSHA standards.

### **TELEPHONE NUMBERS**

Centers for Disease Control	404-639-3311
CDC Immunization Questions	800-232-2522
CDC Voice Information Service	404-332-4555
National AIDS Clearing House	800-458-5231
National Institute for Occupational Safety & Health	800-356-4674
National HIV and AIDS Information Service	800-342-2437
South Carolina State Immunization Project Director	803-898-0720
South Carolina Hepatitis B Coordinator Elona Rhame	803-898-0712
South Carolina Occupational Health and Safety Administration	803-896-7665
SC AIDS Hotline	800-322-2437
Occupational Safety and Health Administration (OSHA)	212-264-9840
Horry County Health Department SC DHEC Region 6 Public Health Office	843-915-8804
<b>Doctors Care</b>	<b>843-444-2901</b>
<b>Occupational Infectious Control Nurse (cell)</b>	<b>843-957-7871</b>
<b>Risk Manager</b>	<b>843-915-7350</b>
<b>Safety Manager</b>	<b>843-915-7356</b>

**APPENDIX A  
HORRY COUNTY  
INFORMED REFUSAL LETTER**

Hepatitis B vaccine is available to all employees who could be expected to come into contact with human blood and other potentially infectious materials in the course of their work. There is NO CHARGE to the employee.

If you do not wish to have the vaccine at this time, please read and sign the refusal form.

\*\*\*\*\*

**REFUSAL FORM FOR HEPATITIS B  
VACCINE**

\*\*\*\*\*

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

[OSHA 1910.1030 Appendix A]

\_\_\_\_\_  
Date

\_\_\_\_\_  
\_(Print) Name and Soc. Sec. No.

\_\_\_\_\_  
Signature

\*\*\*\*\*

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE  
CONTROL PROGRAM COORDINATOR**

**APPENDIX B**  
**HORRY COUNTY**  
**EMPLOYEE VACCINATION CONSENT FORM**

This is to certify that I, \_\_\_\_\_, have been informed of my need to take the Hepatitis B Vaccine (being potentially exposed to blood or body in the course of my job).

I have been briefed on the health hazards posed by Hepatitis B, and the possible hazards associated with the Hepatitis B Vaccine. I have also been briefed on, and have knowledge of usage, contraindications, precautions, adverse reactions, dosage and administration.

I understand that I must have three (3) doses of the vaccine within a six month period, to confer immunity, and that the cost of the Hepatitis B Vaccine shall be assumed by the County.

As with all medical treatment, there is no guarantee that I shall become immune or that I will not experience any adverse side effects from the vaccine. I request that the vaccine be given to me.

Employee Signature \_\_\_\_\_ Date \_\_\_\_\_

Date Vaccinated

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE  
CONTROL PROGRAM COORDINATOR ...COPY TO MEDICAL PROVIDER**

## **APPENDIX C**

### **PROTOCOL FOR NEEDLE OR OTHER CONTAMINATED INJURIES PROCEDURE**

Encourage bleeding at the wound or puncture site.

Wash the area thoroughly.

Place the contaminated needle or object in a puncture proof container and follow proper disposal method to prevent further injury.

Notify supervisor/department head of the accident and call the Occupational Infectious Disease Control Nurse at 843-957-7871 (cell).

The Occupational Infectious Disease Control Nurse will direct the employee on where to report for evaluation and treatment.

The physician evaluating/treating the worker will determine if prophylaxis or medical treatment is indicated per CDC/OSHA guidelines.

If questions arise concerning the proper procedure to follow, Doctors Care should be consulted.

Persons who have been immunized with hepatitis B vaccine must still report an exposure and be seen by the Doctors Care.



## **APPENDIX D**

### **Physician's Evaluation of Bloodborne Injury for Post-Exposure Treatment**

Following a potential non-sexual exposure to the human immunodeficiency virus (HIV), a limited amount of scientific evidence suggests that the **prompt** use of anti-HIV medication(s) can slow or actually prevent the development of HIV infection in humans. *After reading the following information, discuss these points and your situation with your health care provider before proceeding with treatment. Make sure all of your questions have been answered to your satisfaction.*

U.S. Public Health Service recommendations for HIV post-exposure drug treatment include the use of one, two or three drugs. Zidovudine, lamivudine and indinavir (or equivalent medications) may be used singly or in combination for post-exposure treatment, depending upon the likelihood of a person actually having been exposed to HIV and other factors. You have the right to decline any or all of the recommended drugs at any time, before or after treatment begins.

The best scientific evidence currently available suggests that post-exposure treatment for possible HIV infection is best started within one to two hours after exposure, and continued for four weeks. If you are unsure that you wish to commit to a four week course of treatment, you might consider at least starting the medications now so that you have a bit more time to consider your options. At this time, it is unknown just how long starting treatment can be delayed yet still offer some benefit. Beginning the treatment beyond one to two hours after exposure may slow but not prevent the establishment of HIV infection in the body.

Before treatment is begun and at regular intervals afterwards, blood tests and clinic visits will be used to monitor for possible medication side-effects and the presence or absence of HIV infection. Your health care provider will discuss the tests and schedule with you.

If it is likely that you were exposed to HIV your health care provider will discuss with you the steps you can take to prevent the potential spread of HIV infection from yourself to other persons.

Remember that if your possible HIV exposure occurred at work and as a result of your usual work duties, today's and subsequent evaluations, clinic visits, medication(s) and laboratory testing will be filed under your employer's worker's compensation coverage.

**APPENDIX D**  
**PHYSICIAN'S EVALUATION OF BLOODBORNE INJURY**

Employee's Name \_\_\_\_\_ Date \_\_\_\_\_

Employee's SSAN \_\_\_\_\_ Date of Injury \_\_\_\_\_

Description of Injury/Exposure: \_\_\_\_\_

**EMPLOYEE:** History of Hepatitis B: Yes \_\_\_ No \_\_\_;  
History of +HIV: Yes \_\_\_ No \_\_\_  
Previous Hepatitis B vaccine: No \_\_\_ Yes \_\_\_ 1 dose \_\_\_ 2 doses \_\_\_ 3 doses \_\_\_  
Date completed \_\_\_\_\_ Booster (date) \_\_\_\_\_  
HB AB/AG date \_\_\_\_\_ Results \_\_\_  
HIV-AB date \_\_\_\_\_ Results \_\_\_  
Anti-HCV date \_\_\_\_\_ Results \_\_\_  
Liver function tests: Normal \_\_\_ Abnormal \_\_\_ Not Indicated \_\_\_ RPR \_\_\_

**SOURCE PATIENT:** History of Hepatitis B: Yes \_\_\_ No \_\_\_;  
History of +HIV: Yes \_\_\_ No \_\_\_  
Previous Hepatitis B vaccine: No \_\_\_ Yes \_\_\_ 1 dose \_\_\_ 2 doses \_\_\_ 3 doses \_\_\_  
Date completed \_\_\_\_\_ Booster (date) \_\_\_\_\_  
HB AB/AG date \_\_\_\_\_ Results \_\_\_  
HIV-AB date \_\_\_\_\_ Results \_\_\_  
Anti-HCV date \_\_\_\_\_ Results \_\_\_  
Liver function tests: Normal \_\_\_ Abnormal \_\_\_ Not Indicated \_\_\_ RPR \_\_\_

**RECOMMENDATIONS:** (After review of above data)

\_\_\_ No treatment: evaluation suggests exposure to any disease was unlikely

\_\_\_ No treatment: you already have adequate immunity to Hepatitis B

\_\_\_ H-BIG: \_\_\_ 1 dose \_\_\_ 2 doses at 28 days

\_\_\_ Hepatitis B vaccine series (0-1-6 months) started \_\_\_\_\_

Reason(s) for Hepatitis B vaccine: \_\_\_\_\_

\_\_\_ Hepatitis B vaccine booster; Date: \_\_\_\_\_

\_\_\_ Recommended HIV follow-up: baseline, 6 weeks, 3-6-12 months

\_\_\_ HIV counseling: yes \_\_\_ no \_\_\_

\_\_\_ OTHER treatment: \_\_\_\_\_

Started Date \_\_\_\_\_ Time \_\_\_\_\_

Physician \_\_\_\_\_ Date \_\_\_\_\_

**APPENDIX E**  
**HORRY COUNTY**  
**WAIVER TO SUBMIT TO FOLLOW-UP PROCEDURES**  
**AFTER POSSIBLE EXPOSURE TO INFECTIOUS DISEASE**

I, \_\_\_\_\_, have been briefed on the requirements of follow-up testing to evaluate my possible exposure to \_\_\_\_\_. I understand that testing is medically indicated.

I have been given the opportunity to ask questions all of which were answered to my satisfaction, and I believe that I understand the risks of my possible exposure and the benefits that follow-up testing might provide.

I understand that no adverse action can be taken against me on the grounds that I refused testing and follow-up since the procedures are designed for my benefit.

I understand that Worker's Compensation may deny claims for which initial testing and follow-up were refused.

I hereby decline testing or follow-up examination and relieve all parties of any liability in this matter.

\_\_\_\_\_  
Signature of Employee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Date

Type of Exposure: \_\_\_\_\_

Date of Exposure: \_\_\_\_\_

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE CONTROL PROGRAM COORDINATOR ...COPY TO MEDICAL PROVIDER**

**APPENDIX F**  
**HORRY COUNTY**  
**INFORMED CONSENT TO PERFORM TESTS**  
**AND TO RECORD RESULTS**

Name of Employee: \_\_\_\_\_ Date: \_\_\_\_\_

Tests to Be Performed:

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I, \_\_\_\_\_, have been briefed on the procedures for the above tests. I understand the need for these tests. I have been given the opportunity to ask questions and they have been answered to my satisfaction.

I understand that any test results will be part of my personal medical record. I understand that my test results and my medical records are strictly confidential and will be shared only with health care providers directly involved in my care, or others that I may authorize.

I understand the benefits and risk of these tests. I agree to have the testing completed and results recorded in my medical records.

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE CONTROL PROGRAM COORDINATOR ...COPY TO MEDICAL PROVIDER**

**APPENDIX G**  
**HORRY COUNTY**  
**EXPOSURE INCIDENT REPORT**

Note: Workers Compensation Forms 12a should be completed and attached to this report.  
All applicable appendixes to the Blood Borne Pathogens SOP shall be completed and attached  
This report should be completed and returned to Risk Management within 24 hours of incident.

Employee: \_\_\_\_\_ Department: \_\_\_\_\_

Exposure Date: \_\_\_\_\_ Time: \_\_\_\_\_ AM / PM

What was employee exposed to? (Blood, Saliva, other...) \_\_\_\_\_  
\_\_\_\_\_

Describe how the exposure occurred: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Was personal protective equipment being used? \_\_\_\_\_ Type: \_\_\_\_\_

Actions taken (decontamination, etc.): \_\_\_\_\_

Any failure of personal protective equipment: \_\_\_\_\_  
\_\_\_\_\_

Detailed explanation if personal protective equipment was not in use: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Names of other potentially exposed persons in this incident:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

**SOURCE OF POTENTIAL EXPOSURE INFORMATION**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Social Security Number: \_\_\_\_\_

Address: \_\_\_\_\_

Continued...

Receiving Hospital: \_\_\_\_\_

Attending Physician: \_\_\_\_\_

Preliminary instructions to the employee (to include follow-up appointments): \_\_\_\_\_

\_\_\_\_\_

Follow-up protocol followed: \_\_\_\_\_

\_\_\_\_\_

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE  
CONTROL PROGRAM COORDINATOR ...COPY TO MEDICAL PROVIDER**

**APPENDIX H**  
**HORRY COUNTY**  
**NEEDLE STICK (SHARPS) LOG**  
**REPORT**

Employee: \_\_\_\_\_

**Department:** \_\_\_\_\_

Incident Date: \_\_\_\_\_ Time: \_\_\_\_\_ AM / PM

Type and Brand of device involved, if unsure include description of device:

\_\_\_\_\_  
\_\_\_\_\_

Describe how the incident occurred: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Was personal protective equipment being used? \_\_\_\_\_ Type:

\_\_\_\_\_

Exposure Incident Report Completed? \_\_\_\_\_

**THIS FORM MUST BE RETURNED TO THE DEPARTMENT EXPOSURE  
CONTROL PROGRAM COORDINATOR**

## **CHAPTER – 6**

### **PERMIT REQUIRED CONFINED SPACE PROGRAM**

*01 July, 2012*

#### **POLICY**

The policy of Horry County is to comply with the Occupational Safety and Health standard for Permit Required Confined Spaces Standard 1910.146. This standard requires employers to enact operational procedures that will protect employees from the hazards of entry into confined spaces.

#### **PURPOSE**

The purpose of this procedure is to establish mandatory practices and procedures that will protect employees of Horry County who in the course of their employment are periodically called upon to enter and perform work in confined spaces. These practices and procedures have been designed to eliminate the potential for injury and illness that are associated with entering and working in confined spaces.

#### **APPLICABILITY**

This policy applies to all county personnel (permanent, temporary, part-time, volunteers and contractors) who, in the performance of their duties for Horry County, may be called upon to enter a confined space.

#### **REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.



## GENERAL REQUIREMENTS

### SURVEY OF CONFINED SPACES

The department head will be responsible for an initial survey and annual resurvey of all potential confined spaces that employees might enter as defined by the standard.

The survey will be conducted using the Confined Space Identification form shown as Appendix A.

To identify confined spaces, each potential confined space will be compared to the requirements of the confined space regulation summarized in the following three questions:

- Is the space large enough for bodily entry and performance of assigned work?
- Is access, entry and exit, limited or restricted for the space?
- Is the space **not** designed for continuous human occupancy?

If the response to all of the above three questions is YES, then the space is a confined space. If the response to any is NO, then the space is not a confined space as covered by this regulation.

If, **in addition** to a positive response to the above three questions, the space also has a Hazard Potential, the space is a Permit-Required Confined Space. A Hazard Potential can consist of one or more of the following items:

- Contains, or has the potential to contain, a hazardous atmosphere
- Contains a material than can engulf
- Has a configuration that can entrap or asphyxiate
- Has any other recognized hazard

All possible confined spaces should then be defined as either:

- Not a confined space
- A Confined Space, not permit-required
- A Permit-Required Confined Space

## **LABELING, DOCUMENTATION, AND ENTRY CONTROL**

Once all Confined Spaces, permit-required and non permit-required, are identified, a list will be developed and included in this procedure as shown in Appendix B.

This list will be used as part of employee training (see page 6)

Each Permit-Required Confined Space will be identified in the field with a sign that reads

*"DANGER - CONFINED SPACE - PERMIT-REQUIRED, DO NOT ENTER".*

Each Non-Permit-Required Confined Space will be identified in the field with a sign that reads

***"DANGER - CONFINED SPACE – AUTHORIZED ENTRANTS ONLY".***

All Confined Spaces will be readily identifiable and shall be locked to prevent unauthorized entry. If the entry cannot be locked, then a fence or barrier to prevent unauthorized entry shall be installed.

All manholes shall be considered Permit Required Confined Spaces unless they have been evaluated and are listed in Appendix B as Non-permit spaces. Manhole covers do not require labeling since all are considered as Permit Required and cannot be locked.

The department head shall be responsible for designating confined spaces and for designating qualified persons to act as entrants, attendants and entry supervisors.

Any changes to confined spaces that might change its classification shall be reevaluated by the department head for upgrade to permit required, or downgraded to a non permit required space. This reclassification shall be accomplished according to 29 CFR 1910.146.

Disciplinary actions (up to and including dismissal) may be taken against any county employee that enters a permit-required confined space without authorization, or fails to follow proper procedures.

All open manholes or other entries that pose a risk to pedestrians, vehicles, or monitors shall be barricaded or cordoned to protect entrants and by-passers alike.

## ACCEPTABLE ENTRY CONDITIONS

"Acceptable entry conditions" means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

The following conditions must be met in order to meet acceptable entry conditions:

- All employees must be aware of the hazards or potential hazards.
  - There shall be no Hazardous atmosphere in the confined space. Ventilation must maintain a safe environment. In the event that a safe atmosphere cannot be maintained then all entrants must use Self Contained Breathing Apparatus.
  - "Hazardous atmosphere" means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:
    - Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
    - Airborne combustible dust at a concentration that meets or exceeds its LFL; **NOTE:** This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
    - Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
    - Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of this Part and which could result in employee exposure in excess of its dose or permissible exposure limit; **NOTE:** An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.
  - Any other atmospheric condition that is immediately dangerous to life or health.
- NOTE:** For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, section 1910.1200 of this Part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

## **ENTRY PERMITS**

### **PREPARATION**

When it is determined that entry into a confined space is required, the supervisor shall contact the Department Head to verify if an entry permit is required.

The Department Head shall personally evaluate the requirement for entry and verify:

- Purpose for entry
- Preparations required/completed for entry
- Prior documented atmospheric hazard test results
- Equipment condition and availability
- Rescue procedures established
- Qualifications of entrants, attendants, and supervisors

### **PERMIT ISSUE**

The Department Head or designee shall complete and issue an entry permit to the Entry Supervisor if it is determined that all safety factors are within acceptable entry conditions, and when all specified testing has been completed

Permits shall be issued only if all personnel assigned to task have completed confined space training and are competent in the work to be performed.

### **PERMIT USE**

The Entry Supervisor shall ensure the entry permit is posted at the entrance of the confined space for review by all entrants, and to provide ready information on testing and rescue procedures.

The Department Head shall ensure the entry supervisor identified on the permit signs it to authorize entry into the specified confined space only after all acceptable entry conditions are met.

### **PERMIT CANCELLATION**

The entry supervisor shall terminate entry and cancel the entry permit when:

- The entry operations covered by the entry permit have been completed; or
- A condition that is not allowed under the entry permit arises in or near the permit space.

## **ENTRY PROCEDURES**

All employees are to be advised of the potential hazard(s).

There shall be no entry into a permit-required confined space without proper authorization and a permit signed by a designated entry supervisor. Other required permits (HOT WORK, LOCKOUT/TAGOUT) must be also obtained prior to entry. Contact the Department Head to obtain an entry permit.

All Entrants shall be allowed the opportunity to inspect the entry permit and observe pre-entry testing and test results prior to their entry into the space.

Prior to entering the confined space, atmospheric testing shall be conducted to test, in the order given, for: oxygen content, flammable gases and vapors, and toxic gases. If after testing, it is determined that the level of toxic or combustible gas is too high, or the oxygen level is too low, ventilate and test the space again.

Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized to begin, except that, if isolation of the space is infeasible because the space is large or part of a continuous system (such as a sewer), pre-entry testing shall be performed to the extent feasible before entry is authorized. If entry is authorized, entry conditions shall be continuously monitored in the areas where authorized entrants are working.

Prior to entry into a permit required confined space, all hazards that can be eliminated such as water flow, electrical energy, or operating machinery shall be shut down and locked/tagged out to reduce or eliminate potential hazards.

A designated attendant will always be on stand-by at the entrance of the space to monitor the entrant's status and to maintain contact with the entrant.

When entering a confined space, entrants shall be attached to a mechanical retrieval system, unless the retrieval system would increase the overall risk of entry or would not contribute to the rescue of the entrant. The retrieval line shall be attached to an entrant by means of a chest or full body harness at the center of the back near shoulder level or above the head.

Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations.

Employees entering a confined space shall use the necessary safety equipment (gloves, hard hat, hearing protection, respiratory protection, as necessary).

When the job is completed, all materials and tools shall be removed from the space and the entry to the space closed. The Entry Supervisor will cancel the permit upon completion of the work. This permit will be kept on file for a period of one year.

## **ALTERNATE ENTRY PROCEDURES**

Under certain conditions, the employer may use alternate procedures for worker entry into a permit required confined space. An employer whose employees enter a permit space need not comply with paragraphs (d) through (f) and (h) through (k) of 1910.146; 29CFR1910.146 (d) - Permit-Required Confined Space Program

29CFR1910.146 (e) - Permit System

29CFR1910.146 (f) - Entry Permit

29CFR1910.146 (h) – Duties of authorized Entrants

29CFR1910.146 (i) – Duties of Attendants

29CFR1910.146 (j) - Duties of Entry Supervisors

29CFR1910.146 (k) – Rescue and Emergency Services

### **provided that:**

The employer can demonstrate that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;

The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry;

The employer develops monitoring and inspection data that supports the demonstrations required by paragraphs a and b above.

If an initial entry of the permit space is necessary to obtain the data required by paragraph c above, the entry shall be performed in compliance with paragraphs (d) through (k) of 29 CFR 1910.146.

The determinations and supporting data required by paragraphs a, b, and c above are documented by the employer and are made available to each employee who enters the permit space; and

Entry into the permit space under the above terms is performed in accordance with the following requirements;

Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.

When entrance covers are removed, a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space shall promptly guard the opening.

Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee, who enters the space, or that employee's authorized representative, shall be provided an opportunity to observe the pre-entry testing required by this paragraph.

There may be no hazardous atmosphere within the space whenever any employee is inside the space.

Continuous forced air ventilation shall be used, as follows:

An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;

The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space;

The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.

The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee, who enters the space, or that employee's authorized representative, shall be provided with an opportunity to observe the periodic testing required by this paragraph.

If a hazardous atmosphere is detected during entry:

Each employee shall leave the space immediately;

The space shall be evaluated to determine how the hazardous atmosphere developed; and

Measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

The employer shall verify that the space is safe for entry and that the pre-entry measures required by paragraph (c)(5)(ii) of 29 CFR 1910.146 have been taken, through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification shall be made before entry and shall be made available to each employee entering the space or to that employee's authorized representative.

## **ATMOSPHERIC TESTING PROCEDURES**

Atmospheric testing is required for two distinct purposes: evaluation of the hazards of the permit space and verification that acceptable entry conditions for entry into that space exist.

Evaluation testing: The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity to identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data, and development of the entry procedure, should be done by, or reviewed by, a technically qualified professional (e.g., OSHA consultation service, or certified industrial hygienist, registered safety engineer, certified safety professional, certified marine chemist, etc.) based on evaluation of all serious hazards.

Verification testing: The atmosphere of a permit space which may contain a hazardous atmosphere should be tested for residues of all contaminants identified by evaluation testing using permit specified equipment to determine that residual concentrations at the time of testing and entry are within the range of acceptable entry conditions. Results of testing (i.e., actual concentration, etc.) should be recorded on the permit in the space provided adjacent to the stipulated acceptable entry condition.

Duration of testing: Measurement of values for each atmospheric parameter should be made for at least the minimum response time of the test instrument specified by the manufacturer.

Testing stratified atmospheres. When monitoring for entries involving a descent into atmospheres that may be stratified, the atmospheric envelope should be tested a distance of approximately 4 feet (1.22 m) in the direction of travel and to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response.

Order of testing: A test for oxygen is performed first because most combustible gas meters are oxygen dependent and will not provide reliable readings in an oxygen deficient atmosphere. Combustible gases are tested for next because the threat of fire or explosion is both more immediate and more life threatening, in most cases, than exposure to toxic gases and vapors. If tests for toxic gases and vapors are necessary, they are performed last.



## **RESCUE PROCEDURES**

In the event of an emergency, the attendant shall not enter the confined space in order to rescue the entrant(s). Instead, the attendant shall use a retrieval system to make a non-entry rescue.

If entry of the space is necessary in order to rescue the entrant(s), the attendant shall immediately contact Horry County Fire Rescue by dialing 911, or by radio-phone if so equipped.

Horry County Fire Rescue is designated as the county's rescue service. They are equipped with compressed air cylinder breathing apparatus, stretcher, first aid supplies, rescue equipment and are trained for rescue duties.

The Entry Supervisor shall coordinate all confined space entries with HCFR prior to employees entering the confined space. Entry shall proceed only when the HCFR is aware of the entry, and are available for rescue duties.

HCFR shall notify the Entry Supervisor if they are not available to provide coverage for the confined space operation. The Entry Supervisor shall cease confined space operation until rescue service coverage is reinstated.

## **CONTRACTOR MANAGEMENT**

In the event that Horry County hires an outside contractor to perform in areas designated as permit-required confined spaces, then the Department Head shall:

Ensure that the contractor has provided his/her employees with the training necessary to safely enter confined spaces;

Provide the contractor with a list of permit-required confined spaces and inform him/her that entry is allowed only with a permit;

Provide an explanation of the potential hazard(s) that make the space a permit-required confined space;

Explain precautions or procedures implemented by Horry County to protect employees or non-employees working in or near permit-required confined spaces;

Coordinate entry operations if county employees and contractor employees are simultaneously working in or near a permit-required confined space so that they do not endanger one another; and

Talk to the contractor after entry operations have been complete about any hazards encountered during entry.

The Department head will independently and periodically monitor contractor compliance with the Horry County procedures. Any problems will be identified and immediately corrected.

## **EQUIPMENT**

The Department Head is responsible for providing the following equipment in order to ensure the safe entry of confined spaces:

- Testing and monitoring meter;
- Ventilating equipment;
- Personal protective equipment;
- Communications equipment;
- Chest or Full Body Harness for each Entrant
- Barriers, lighting and retrieval/rescue equipment.

All equipment utilized shall be tested on a routine basis to ensure proper working conditions.

## **RESPONSIBILITIES**

Department Heads are responsible for ensuring that these provisions are carried out within their department or division.

The **entrant** is responsible for carrying out the duties listed below:

- Knowing the hazards that may be faced during entry into a confined space;
- Properly using all safety equipment provided by the employer;
- Communicating with the attendant so that he/she can effectively monitor the situation within the space;
- Alerting the attendant whenever an unacceptable condition arises; and
- Exit the space whenever ordered to do so by the attendant, or when an unacceptable condition exists within the space.

The **attendant** is responsible for carrying out the duties listed below:

- Knowing the hazards that may be faced by entrants;
- Being aware of how these hazards may affect the entrant's behavior;
- Identifying and maintaining an accurate count of all entrants;
- Remaining outside the space until relieved by another attendant;
- Communicating with entrants in order to monitor their status and any need to evacuate the space;
- Continuously monitoring activities inside and outside the space to determine if it is safe for entrants to remain in the space;
- Summoning rescue and emergency services when he/she determines entrants may need assistance to escape;
- Preventing unauthorized persons from approaching or entering space when an entry is underway;
- Performing non-entry rescues as specified in the rescue procedure; and

- Performing no other duties that might interfere with their duty to monitor and protect the entrants.

The **Entry Supervisor** is responsible for carrying out the duties listed below:

- Knowing the hazards that may be faced by entrants;
- Checking the entry permit to ensure that all tests have been conducted and equipment is in place before signing the permit and allowing entry;
- Terminating the permit when the work is completed or when a condition not allowed arises;
- Verifying that rescue services are available and the means for summoning rescue is operable;
- Removing unauthorized persons who enter or attempt to enter the space during entry operations; and
- Ensure that entry operations follow permit terms; and that acceptable entry conditions are maintained.

## **TRAINING**

Employees shall be advised of the hazards associated with working in a confined space. Entry supervisors, attendants and entrants shall receive training covering the following subjects:

- Recognition of hazards present within the space;
- Use of atmospheric testing equipment for those authorized to perform atmospheric tests;
- Use of tripod/retrieval system;
- Control of potential sources of hazardous energy (i.e., electricity, water, hydraulic and others); and
- Emergency rescue methods and procedures.

Employees shall not be assigned to duties involving confined space entry until they have received the proper training.

Horry County Fire Rescue shall practice making confined space rescues at least once every 12 months, by means of simulated rescue operations by removing dummies, mannequins or actual persons from spaces or representative spaces.

All Fire/Rescue personnel will receive training in the recognition of hazards present within a confined space.

Employees affected by this policy shall receive refresher training on an annual basis.

Documentation of training shall be kept on file by the Department Head. In addition to the description of the training session, the record shall include the following information: employee's names, dates of training, and signatures or initials of trainees.

## **PROGRAM REVIEW**

The permit-required confined space program will be audited by reviewing cancelled permits on an annual basis.

The program will also be reviewed whenever there is reason to believe that the program does not properly protect employees. Examples of circumstances requiring review are: Unauthorized entry, Detection of space hazard not covered, Detection of unacceptable entry conditions, Injury or near miss, and Employee complaints about program effectiveness.

Entry permits shall be retained for a period of one year to facilitate the review required by this policy.



# Appendix B

## CONFINED SPACES SURVEY

The following table will name, locate and classify the confined spaces associated with the **Storm Water Department:**

NAME	LOCATION	PERMIT REQUIRED
All Man holes		
All storm drains		







**Appendix C**  
**CONFINED SPACE PROGRAM**  
**CONTRACTOR'S NOTIFICATION**

I have been informed that the work to be performed for Horry County on

\_\_\_\_\_ involves entry into a confined space of the type:

*Date*

\_\_\_\_\_

*Write in Type of Confined Space*

If the space is a permit required confined space I understand that entry is allowed only through compliance with the county's written permit required confined space program and certify that permitting and entry procedures contained in the program will be followed.

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Contractor Signature

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Horry County Representative

Date: \_\_\_\_\_

# Appendix D

## PERMIT REQUIRED CONFINED SPACE ENTRY PERMIT

Permit Space to be entered:	
Job Supervisor:	

### PURPOSE

SPECIFY: Maintenance, Inspection, Repair, other...

### DATE

Date of issue	Date Expires
Time of issue	Time Expires

### ENTRY PREPARATION

YES    NO

N/A

#	Description	YES	NO	
1	Empty and cleaned to the maximum extent possible			
2	Tank/ space has been purged, flushed, or ventilated			
3	Continuous Mechanical Ventilation (Explosion Proof)			
4	Natural ventilation			
5	Space has been isolated by blinding, disconnecting, or blocking pumps & lines			
6	Energy Control (Lockout/Tagout) procedures followed			
7	Area is posted and barricaded to prevent unauthorized entry			
8	Open Flame procedures followed (if required)			

### ACTUAL/POTENTIAL HAZARDS

### CONTROLS


# Appendix D

## ATMOSPHERIC CHECK

YES      NO      N/A

1	Monitor has been calibrated and tested			
2	Atmospheric check after isolation and ventilation			

<b>Test Equipment Make, Model</b>	
Tests and Calibration Performed By	
Date/Time Testing Performed	
Individual Performing test Qualified?	

Record continuous monitoring results every hour

<b>AIR MONITORING</b>	TIME Initials	TIME Initials	TIME Initials	TIME Initials	TIME Initials	TIME Initials	TIME Initials	TIME Initials
% O <sub>2</sub> (19.5% TO 23.5%)								
% LEL (Under 10% LEL)								
<b>PPM Toxics</b> Hydrogen Sulfide *15 PPM (15min) 10PPM (8hr avg)								
Other								

## ACCEPTABLE ENTRY CONDITIONS


## COMMUNICATION PROCEDURES


## Appendix D

<b>EQUIPMENT</b>		YES	NO	N/A
1	Safety harnesses and lifelines for Authorized entrants			
2	Personal protective equipment (gloves, hardhat, etc.)			
3	Respiratory protective equipment (SCBA/SAR/APR)			
4	Powered communications (readily available/tested)			
5	SCBA's for entry personnel			
6	Rescue and Extraction (hoisting) equipment			
7	All electric equipment listed Class I, Division I, Group D and Non-sparking tools			
8	Fire Extinguishers Available			
9	Explosion proof lighting			
10	Burning and Welding permits (if required)			

### ***RESCUE PROCEDURES***


<b>ATTENDANT CHECKLIST</b>		YES	NO	N/A
1	Entry permit posted			
2	Harness and lifeline used			
3	SCBA readily available			
4	Powered communications available			
5	Knows not to leave job site except to make emergency call			
6	Knows not to enter confined space			
7	Knows location of emergency first aid			
8	Knows proper use of fire extinguisher			
9	Knows proper use of respirators			
10	Knows the location of the nearest telephone, safety shower, exit and fire alarm pull station			

# Appendix D

## AUTHORIZATION

This permit is valid for the period specified or until the entry operations covered by the permit are completed,(not to exceed 8 hours), and becomes void if there are any changes in existing or perceived permit conditions. This permit must remain at the job site until operations are completed. Return job site copy to the Safety Director following job completion.

We have reviewed the work authorized by this permit and the information contained herein. Confined space entry procedures and related safety procedures have been reviewed and are understood.

	NAME	SIGNATURE	DATE	TIME
Original Entry Supervisor				
Entry Supervisor				
Authorized Entrant				
Authorized Entrant				
Authorized Entrant				
Authorized Entrant				
Attendant				
Attendant				
Dept Head Approval				

Ambulance & Fire 911

Risk Management 915-5230

**ATTACH ANY OTHER PERMITS, SUCH AS HOT WORK PERMITS HERE**

## **CHAPTER - 7**

### **LOCK OUT/TAG OUT PROGRAM**

*01 July, 2012*

#### **POLICY**

Horry County is firmly committed to providing each of its employees a safe and healthy work environment. It is a matter of county policy, as well as state and federal laws. Horry County has implemented this Lock Out/Tag Out Program as outlined herein.

Horry County Risk Management Staff will have the overall responsibility for coordinating the program for the Horry County.

#### **PURPOSE**

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury.

#### **APPLICABILITY**

This regulation applies to all equipment that must be locked out or tagged out before maintenance is initiated. This minimal Lockout/Tagout Procedure is based on Attachment 1 to the Control of Hazardous Energy standard, 1910.147.

#### **REFERENCE**

This policy is created in accordance with Occupational Safety and Health Act-Standard 29 CFR 1910.147.

#### **PROCEDURE**

#### **PERSONNEL AFFECTED**

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment that is locked out to perform servicing or maintenance, shall not attempt to start, energize or use that machine or equipment.

Affected employees of the following departments should be instructed in Lockout/Tagout procedures.

**Detention**  
**Fire Rescue**  
**Public Works Department**  
**Storm Water Department**  
**Maintenance Department**  
**Vehicle Maintenance**  
**Airport**  
**Police Department**  
**Other personnel as required**

## **STEPS TO IDENTIFY AND CONTROL HAZARDOUS ENERGY**

Locate and identify all isolating devices to be certain which switch(s), valve(s) or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, or others) may be involved.

Appendix A contains a list of applicable site equipment and their energy isolating devices. This list is updated annually or as required by the Department Head.

## **LOCKOUT**

If an energy isolating device is capable of being locked out, lockout shall be utilized, unless it can be demonstrated that the utilization of a tag-out system will provide full employee protection.

When replacement, repair, renovation or modification of equipment is performed, and when new equipment is installed, energy isolating devices for such equipment shall be designed to accept a lockout device.

The authorized employee shall refer to this procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.

Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools.

## **STEPS TO PERFORM LOCKOUT**

Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.).

De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

Lock out the energy isolating device(s) with assigned individual lock(s). Lockout devices, where used, shall be affixed in a manner that will hold the energy isolating devices in a "safe" or "off" position.

Lockout devices shall indicate the identity of the employee applying the device(s).

Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

**Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.**

The machine or equipment is now locked out.



## TAGOUT

Tags are warning devices attached to energy isolating devices, and do not provide the physical restraint that is provided by a lock. Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

Tagout devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Tagout device attachment means shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one-piece, all environment-tolerant nylon cable tie.

## STEPS TO PERFORM TAGOUT

If a device is not capable of being locked out, the tagout system shall be utilized.

Tagout devices, where used, shall be affixed in a manner so as to clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.

Where tagout devices are used with energy isolating devices and designed with the same capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.

Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

When a tag is attached to an energy isolating means, it is not to be removed without authorization of the person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.

Tags must be legible and understandable by all employees, or others whose work operations are or may be in the area.

Tag out devices shall indicate the identity of the employee applying the device(s).

Tag out devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: **Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate.**

## **REQUIREMENTS FOR TESTING LOCKOUT/TAGOUT EFFECTIVENESS**

If there is a possibility of re-accumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

**Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.**

The machine or equipment is now locked out, and servicing or maintenance may begin.

## **RESTORING EQUIPMENT TO SERVICE**

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

Check the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

Check the work area to ensure that all employees have been safety positioned or removed from the area.

Verify that the controls are in neutral.

**Note: Each lockout or tag out device shall be removed from each energy-isolating device by the employee who applied the device.**

Remove the lockout devices and re-energize the machine or equipment.

**Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.**

Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.

## **LOCKOUT OR TAGOUT DEVICES REMOVAL**

Each lockout or tag out device shall be removed from each energy-isolating device by the employee who applied the device.

**Exception to paragraph (a):** When the authorized employee who applied the lockout or tag out device is not available to remove it, that device may be removed under the direction of the Department Head, provided that the following procedures have been accomplished:

- Notify the Department Head that a condition exists requiring someone other than the employee who installed a device to remove it.
- Verify that the authorized employee who applied the device is not at the facility.
- Make all reasonable efforts to contact the authorized employee to inform him/her that his/her lockout or tag out device has been removed.
- Ensure that the authorized employee has this knowledge before he/she resumes work at that facility.

## **TESTING OF MACHINES, EQUIPMENT OR COMPONENTS**

In situations in which lockout or tag out devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

- Clear the machine or equipment of tools and materials.
- Remove employees from the machine or equipment area.
- Remove the lockout or tag out devices.
- Energize and proceed with testing or positioning.
- De-energize all systems and reapply energy control measures to continue the servicing and/or maintenance.

## **GROUP LOCKOUT OR TAGOUT**

When servicing or maintenance is performed by a crew, craft, department or other group, they shall utilize a procedure, which affords the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tag out device.

Group lockout or tag out devices shall be used with the same procedures as required by individual lockout or tag out and must meet the following specific requirements:

Primary responsibility is vested in the ranking employee for all employees working under the protection of a group lockout or tag out device.

The ranking employee must ascertain the exposure status of individual group members with regard to the lockout or tag out of the machine or equipment.

When more than one crew, craft, department, etc. is involved, assignment of overall lockout or tag out control responsibility must be assigned to a designated Department Head to coordinate affected work forces and ensure continuity of protection.

Each authorized employee shall affix a personal lockout or tag out device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work, and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

**Shift or personnel changes:** Specific procedures shall be coordinated and documented by the Department Head to cover shift or personnel changes to ensure the continuity of lockout or tag out protection, including provision for the orderly transfer of lockout or tag out device protection between off-going and oncoming employees, to minimize exposure to hazards from the unexpected energization or start-up of the machine or equipment, or the release of stored energy. This must be accomplished each time a group lockout or tag out procedure is utilized during a project. The Department Head must approve this procedure in writing.

## **TRAINING**

Before working on any equipment with an energy source, employees are given comprehensive training that includes:

- The OSHA regulation and its intent
- The requirements of this SOP
- Purpose and use of the energy control procedure
- The site equipment, recognition of hazardous energy sources, switches and/or valves or other means necessary for energy isolation and control
- The type of locks and tags authorized and their use
- The various responsibilities assigned within the organization for lock out/tag out
- The limitations of the use of tags

All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out or tagged out

Retraining is provided whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

In addition, retraining shall also be conducted whenever a periodic inspection reveals, or whenever the employer has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

Refresher training is provided at least every two years.

The Department Head shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.

## **CONTRACTOR (OUTSIDE) PERSONNEL**

Whenever contract personnel are to be engaged in activities covered by the scope and application of this standard, the applicable department head and the contractor shall inform each other of their respective lockout or tag out procedures.

The Department Head shall ensure that employees understand and comply with the restrictions and prohibitions of the contractor's energy control program.

## **PERIODIC INSPECTION**

Department Heads with affected employee's, shall conduct a periodic inspection of the energy control procedure (at least annually) to ensure that the procedure and the requirements of this standard are being followed. Any deviations or inadequacies identified should be corrected. Risk Management is available to assist in this process.

# Appendix A

(SAMPLE)

Horry County

## **Lockout/Tag out Procedures**

Water Treatment Plant

### **High Services Pumps (2)**

**Wastewater Holding Tank Pumps (air blowers)**

**Backwash Pump**

**Air Compressors (2)**

**Flocculators (4)**

## EXAMPLE

### Lockout / Tag out Procedures **Wastewater Holding Tank Pumps**

#### **Procedures to Lockout the Wastewater Holding Tank Pumps:**

Inform all “affected” & “other” employees of your intent to lockout the Wastewater Holding Tank Pumps.

Rotate the switch on the control panel power box to the “off” position.

Pull the metal ring out of the side of the switch. Place the Lockout/Tag out device onto the ring on the switch to lock it in the “off” position.

Try to turn the control switch back to the “on” position to see if the Wastewater Holding Tank Pumps will start back up. If pumps do start up; contact maintenance for repairs. Do not attempt any further work on the pumps until the problem has been corrected. If the pumps will not start, then begin your repairs.

The Wastewater Holding Tank Pumps are now locked out.

#### **Procedures to return the Wastewater Holding Tank Pumps to normal service:**

Inform all “affected” & “other” employees of your intent to energize the Wastewater Holding Tank Pumps and return the pumps to normal service.

Ensure that all tools are removed from the area, that all guards have been reinstalled, and that no one is in physical contact with the pumps prior to startup.

Remove the Lockout/Tag out device from the switch on the control panel power box.

Place the switch on the control panel power box in the “on” position.

The Wastewater Holding Tank Pumps are now returned to service.



## **CHAPTER – 8**

### **EXCAVATIONS (TRENCHING & SHORING)**

*01 July, 2012*

#### **POLICY**

The policy of Horry County is to comply with the Occupational Safety and Health standard 29 CFR 1926.650-652 (Subpart P – Excavations). This standard requires employers to enact operational procedures that will protect employees from the hazards of entry into excavations.

#### **PURPOSE**

The purpose of this procedure is to establish mandatory practices and procedures that will protect employees who in the course of their employment are periodically called upon to create or work in excavations. These practices and procedures have been designed to eliminate the potential for injury and illness that are associated with working in and around excavations.

#### **APPLICABILITY**

This policy applies to all county personnel (permanent, temporary, part-time, volunteers and sub-contractors) who, in the performance of their duties for Horry County, may be called upon to excavate soil or enter an excavation.

#### **REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

## **GENERAL PROGRAM REQUIREMENTS**

All excavations shall be made in accordance with the rules, regulations, requirements, and guidelines set forth in 29 CFR 1926.650, .651, and .652; the Occupational Safety and Health Administration's standard on Excavations, except where additional requirements are noted.

Employees who work in or around excavations must be provided training according to their work.

The excavation or trench must either be sloped or supported as required to comply with OSHA requirements.

Traffic around the site must be controlled, and barricades, signs, and/or flag persons used as needed to control both vehicular and pedestrian traffic.

Utilities on the site must be protected and suitable precautions taken if any utility will be disturbed by the work.

Employees must use required personal protective equipment (PPE).

Each department covered by this program must appoint one or more competent person(s) to ensure compliance with this program.

## **PERSONNEL**

### **DEPARTMENT HEAD**

The Department Head will monitor the overall effectiveness of the program.

Each department that conducts work involving excavations must designate a person or persons as Competent Person(s) and assure that these persons receive training as such. The department head must ensure that a Competent Person performs the responsibilities as described in this program.

### **COMPETENT PERSON**

A competent person is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. All competent persons must complete trenching and shoring class, successfully pass the exam, and be certified for successful completion of the class. A competent person should have and be able to demonstrate the following:

Training, experience, and knowledge of:

- soil analysis,
- use of protective systems, and
- requirements of 29 CFR 1926 Subpart P

Ability to detect:

- conditions that could result in cave-ins,
- failures in protective systems,
- hazardous atmospheres
- other hazards, including confined spaces

Competent persons shall also have authority to take prompt corrective measures to eliminate existing and predictable hazards and to stop work when required.

### **EMPLOYEES**

Each employee has the responsibility to follow established procedures, enter an excavation only after receiving training, and must demonstrate a complete understanding of the safe work practices to be followed while working in an excavation. Employees must wear required personal protective equipment.

### **CONTRACTORS**

Contractors performing excavation work on County property must coordinate their work with the appropriate Department Heads to ensure that related activities such as utility shutdown are addressed.

## **TRAINING**

All personnel involved in excavation work must be trained in accordance with the requirements of this program. Training must be provided before the employee is assigned duties working in or near excavations.

Retraining will be provided a minimum of every three years or as necessary to maintain knowledge or skills to safely work in, or in the vicinity of excavations.

## **SITE WORKER TRAINING**

Personnel who conduct work within or in the vicinity of excavations must receive training prior to beginning work at the site. The training must include:

- Requirements of the OSHA Excavations standard
- Work practices
- Hazards relating to excavation work
- Methods of hazard protection
- Use of Personal Protective Equipment
- Procedures regarding hazardous atmospheres
- Emergency and non-entry rescue procedures

## **COMPETENT PERSON TRAINING**

In addition to site worker training, a competent person must also receive training to include:

- Methods of evaluating the site and conducting inspections
- Evaluation and selection of protection methods
- Ensuring compliance with this program
- Requirements under additional applicable programs such as Confined Space and Fall Protection

## **SOIL TYPES**

Because most excavations will be conducted to repair / replace existing county pipelines or equipment (i.e. the soil has been previously disturbed), and in order to reduce the need for testing and evaluating soil types, **ALL excavations performed by county personnel shall be made to meet the requirements for Type C soils only. If an excavation cannot be completed by Type C soil standards, the Department Head must be informed before work proceeds.**

**Type A** - Most stable: clay, silty clay, and hardpan (resists penetration). No soil is Type A if it is fissured, is subject to vibration of any type, has previously been disturbed, or has seeping water.

**Type B** - Medium stability: silt, sandy loam, medium clay and unstable dry rock; previously disturbed soils unless otherwise classified as Type C; soils that meet the requirements of Type A soil but are fissured or subject to vibration.

**Type C** - Least stable: gravel, loamy sand, soft clay, submerged soil or dense, heavy unstable rock, and soil from which water is freely seeping.

## **TESTING METHODS**

**Since Horry County elects to classify all excavations as Type C soil, no testing is required to determine soil type. All excavations shall be treated as Type C soil, and the guidelines of OSHA CFR 1926, Subpart P shall be followed.**

## **SPECIFIC EXCAVATION REQUIREMENTS**

### **SURFACE ENCUMBRANCES**

All equipment, materials, supplies, permanent installations (e.g. buildings, roadways), trees, brush, boulders, and other objects at the surface that could present a hazard to employees working in the excavation must be removed or supported, as necessary, to protect employees.

### **UNDERGROUND INSTALLATIONS**

The location of sewer, telephone, fuel, electric, and water lines as well as any other underground installations that may be encountered during excavation work must be located and marked prior to opening the excavation.

The Competent Person must make arrangements as necessary with the appropriate utility agency for the protection, removal, shutdown, or relocation of underground installations.

If it is not possible to establish the exact location of underground installations, the work may proceed with caution provided detection equipment or other safe and acceptable means (e.g. using hand tools) are used to locate the utility as the excavation is opened and each underground installation is approached.

Excavation work will be conducted in a manner that does not endanger underground installations or employees engaged in the work.

Barricades, shoring, suspension, or other means shall be used to protect employees from coming into contact with left in place utilities.

### **ACCESS AND EGRESS**

Stairs, ladders, or ramps must be provided where employees are required to enter trench excavations four feet or more in depth. Stairs, ladders, and ramps, where used, shall meet OSHA standards. The maximum distance of travel in an excavation to a means of egress shall not exceed 25 feet. Ladders shall extend 36 inches above the excavation.

### **VEHICULAR TRAFFIC**

Employees exposed to vehicular traffic shall be provided with, and shall wear; warning vests or other suitable garments marked with or made of reflectorized or high-visibility material. Warning vests worn by flagmen must be high visibility in color and be of reflectorized material if worn during night work.

## **FALLING LOADS**

No employee will be permitted underneath loads handled by lifting or digging equipment.

Employees will be required to stand away from any vehicle being loaded or unloaded.

Vehicle operators may remain in the cabs of vehicles being loaded or unloaded when the vehicle provides adequate protection for the operator during loading and unloading operations.

## **MOBILE EQUIPMENT**

When mobile equipment is operated adjacent to the edge of an excavation, a warning system will be used when the operator does not have a clear and direct view of the edge of the excavation. The warning system must consist of barricades, hand or mechanical signals, or stop logs. If possible, the surface grade will slope away from the excavation.

## **HAZARDOUS ATMOSPHERES**

Atmospheric testing *must* be conducted in excavations over four feet deep where hazardous atmospheres could reasonably be expected to exist (e.g. landfill areas, near hazardous substance storage, gas pipelines).

Adequate precautions will be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen or other hazardous atmospheres. These precautions include providing appropriate respiratory protection or forced ventilation. Forced ventilation or other effective means will be used to prevent exposure to an atmosphere containing a flammable gas in excess of 20 percent of the lower flammable limit.

When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, testing shall be conducted as often as necessary to ensure the atmosphere remains safe.

Emergency rescue equipment, such as breathing apparatus, safety harness and line, or basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. The equipment shall be attended while in use.

## **WATER ACCUMULATION**

Employees will not work in excavations that contain or are accumulating water unless precautions have been taken to protect employees from hazards posed by water accumulation. The precautions taken could include, for example, special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of safety harnesses and lifelines.

If water is controlled or prevented from accumulating by the use of water removal equipment, a person trained in the use of the equipment must monitor the water removal equipment and operation.

If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means will be used to prevent surface water from entering the excavation. Precautions will also be taken to provide adequate drainage of the area adjacent to the excavation.

Excavations subject to runoff from heavy rains must be re-inspected by the Competent Person to determine if additional precautions should be taken.

## **ADJACENT STRUCTURES**

Support systems (such as shoring, bracing, or underpinning) will be used to assure the stability of structures and the protection of employees where excavation operations could affect the stability of adjoining buildings, walls, or other structures.

Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees will not be permitted except when:

- A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure; or
- The excavation is in stable rock; or
- A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or
- A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.

Sidewalks, pavements and appurtenant structures will not be undermined unless a support system or other method of protection is provided to protect employees from the possible collapse of such structures.

Where review or approval of a support system by a registered professional engineer is required, the Department will secure this review and approval in writing before the work is begun. A copy of this approval must be provided to the Department Head.



## **LOOSE ROCK OR SOIL**

Adequate protection must be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection will consist of:

- Scaling to remove loose material;
- Installation of protective barricades, such as wire mesh or timber, at appropriate intervals on the face of the slope to stop and contain falling material; or
- Benching sufficient to contain falling material.

Excavation personnel will not be permitted to work above one another where the danger of falling rock or earth exists.

Employees must be protected from excavated materials, equipment or other materials that could pose a hazard by falling or rolling into excavations.

Protection will be provided by keeping such materials or equipment at least 2 feet from the edge of excavations, by the use of restraining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

Materials and equipment may, as determined by the Project Manager, need to be stored further than 2 feet from the edge of the excavation if a hazardous loading condition is created on the face of the excavation.

Materials piled, grouped or stacked near the edge of an excavation must be stable and self-supporting.

## **FALL PROTECTION**

Barricades, walkways, lighting and posting must be provided as necessary prior to the start of excavation operations.

Guardrails, fences, or barricades must be provided on excavations adjacent to walkways, driveways, and other pedestrian or vehicle thoroughfares.

Warning lights or other illumination must be maintained as necessary for the safety of the public and employees from sunset to sunrise.

Wells, holes, pits, shafts, and all similar excavations must be effectively barricaded or covered and posted as necessary to prevent unauthorized access. All temporary excavations of this type will be backfilled as soon as possible.

Walkways or bridges protected by standard guardrails must be provided where employees and the general public are permitted to cross over excavations.

Where workers in the excavation may pass under these walkways or bridges, a standard guardrail and toe board must be used.

Information on the requirements for guardrails and toe boards may be obtained by contacting Risk Management or by reviewing the OSHA Walking and Working Surfaces Program.

## **INSPECTIONS**

The competent person shall conduct inspections of excavations, adjacent areas, and protective systems:

- Daily and as needed throughout the shift
- After every rainstorm
- After other events that could increase hazards, such as snowstorm, windstorm, thaw, earthquake, dramatic change in weather, etc

Where the competent person finds evidence of a situation that could result in a possible cave-in, failure of protective systems, hazardous atmosphere, or other hazardous conditions, exposed employees shall be removed from the hazardous area until precautions have been taken to assure their safety.

The competent person shall maintain a written log of all inspections conducted that day. This log shall include the date, work site location, results of the inspection, and a summary of any action taken to correct existing hazards.

(For excavations 4 feet or greater in depth, a trench inspection form (see appendix A) shall be filled out for each inspection.)

## **REQUIREMENTS FOR PROTECTIVE SYSTEMS**

### **PROTECTION OF EMPLOYEES IN EXCAVATIONS**

All employees in an excavation shall be protected by a sloping/benching system or by use of support systems. This protection must be installed and meet the requirements of OSHA 1926.652. Protective systems are not required when:

- Excavations are made entirely in stable rock
- Excavations are less than 5 feet deep and examination by a competent person provides no indication of potential cave-in.

Protective systems shall have the capacity to resist without failure all loads that are intended or that could reasonably be expected.

### **DESIGN OF SLOPING AND BENCHING SYSTEMS**

Horry County has elected to classify all soils encountered as Type “C” therefore design of sloping and benching systems are limited to Option 1 and Option 4 of 1926.652(b).

#### Option (1) - Allowable configurations and slopes:

Excavations shall be sloped at an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal).

Slopes shall be excavated to form configurations that are in accordance with the slopes shown for Type C soil in Appendix B to this subpart. (NO BENCHING OF TYPE “C” SOIL IS PERMITTED).

#### Option (4) - Design by a registered professional engineer:

A registered professional engineer shall approve all Sloping and benching systems that do not utilize Option (1).

Designs shall be in written form and shall include at least the following:

- The magnitude of the slopes that were determined to be safe for the particular project;
- The configurations that were determined to be safe for the particular project;
- The identity of the registered professional engineer approving the design.

At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time the design need not be at the jobsite, but a copy shall be made available to the Secretary upon request.

## **DESIGN OF SUPPORT, SHIELD, AND OTHER PROTECTIVE SYSTEMS**

Design of support systems, shield systems, and other protective systems shall be in accordance with the requirements of 29 CFR 1926.652, paragraph (c)

Horry County Public Works Department maintains one manufactured trench box (shield) to use if required. This shield shall be used per manufacturer recommendations and shall not be utilized beyond its rated capacities. Manufacturer's specifications, recommendations, and limitations, shall be in written form at the jobsite during construction of the protective system. After that time this data may be stored off the jobsite, but a copy shall be made available to the Secretary upon request.

All other shoring methods and materials shall be designed and supervised during construction and placement by a registered professional engineer. Designs shall be in written form and shall include the following:

- A plan indicating the sizes, types, and configurations of the materials to be used in the protective system; and
- Identify of the registered professional engineer approving the design.
- At least one copy of the design shall be maintained at the jobsite during construction of the protective system. After that time, the design may be stored off the jobsite, but a copy of the design shall be made available to the Secretary; SC Department of Labor upon request.

## **MATERIALS AND EQUIPMENT**

Materials and equipment used for protective systems shall be free from damage or defects that might impair their proper function.

Manufactured materials and equipment used for protective systems shall be used and maintained in a manner that is consistent with the recommendations of the manufacturer, and in a manner that will prevent employee exposure to hazards.

When material or equipment that is used for protective systems is damaged, a competent person shall examine the material or equipment and evaluate its suitability for continued use. If the competent person cannot assure the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service, and shall be evaluated and approved by a registered professional engineer before being returned to service.

## **INSTALLATION AND REMOVAL OF SUPPORTS**

### General:

Members of support systems shall be securely connected together to prevent sliding, falling, kick-outs, or other predictable failure.

Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

Individual members of support systems shall not be subjected to loads exceeding those which those members were designed to withstand.

Before temporary removal of individual members begins, additional precautions shall be taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system.

Removal shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation.

Backfilling shall progress together with the removal of support systems from excavations.

### Additional requirements for support systems for trench excavations:

Excavation of material to a level no greater than 2 feet (.61 m) below the bottom of the members of a support system shall be permitted, but only if the system is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the support system.

Installation of a support system shall be closely coordinated with the excavation of trenches.

## **SLOPING AND BENCHING SYSTEMS**

Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.

## **SHIELD SYSTEMS**

### General:

Shield systems shall not be subjected to loads exceeding those which the system was designed to withstand.

Shields shall be installed in a manner to restrict lateral or other hazardous movement of the shield in the event of the application of sudden lateral loads.

Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

Employees shall not be allowed in shields when shields are being installed, removed, or moved vertically.

### Additional requirement for shield systems used in trench excavations:

Excavations of earth material to a level not greater than 2 feet (.61 m) below the bottom of a shield shall be permitted, but only if the shield is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the shield.

## **LIMITATIONS**

Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer in accordance with 29 CFR 1926.652 (b) and (c).

The maximum depth allowed for an open trench is 20 feet using sloping. Depths beyond 20 feet will require the services of a registered professional engineer to design a protection system for deeper excavation.

Appendix A

**HORRY COUNTY  
COMPETENT PERSON TRENCHING AND SHORING DAILY INSPECTION**

Date: \_\_\_\_\_  
Location of Trench: \_\_\_\_\_  
Competent Person in Charge: \_\_\_\_\_  
Weather Conditions: \_\_\_\_\_  
Have underground utilities been located: \_\_\_\_\_  
What type underground utilities are present: \_\_\_\_\_  
Type of trench to be dug (depth, length and for what purpose) \_\_\_\_\_

**TYPE OF SOIL:** County policy directs that ALL soil be treated as type C, if trench cannot be excavated within type C standards then an engineer must be called in to evaluate excavation site prior to continuation of digging.

Is the trench over 4 feet in depth?

Has a ladder been inspected and installed in the trench within 25 feet of the employees?  
Ladder must extend 3 feet above trench opening.

Does an atmospheric hazard exist? \_\_\_\_\_

Could a hazardous atmosphere reasonably be expected to develop? \_\_\_\_\_ If yes atmospheric testing and monitoring is required and rescue equipment must be available.

Is the trench over 5 feet deep? \_\_\_\_\_ If yes, what type of protective system is being used? Sloping, Trench Box, or combination?

If trench box is being used has it been inspected and approved for use? \_\_\_\_\_

Is documentation of trench box inspections and other paperwork available at the jobsite?

Is protective system installed correctly by OSHA standards? \_\_\_\_\_ (no more than 2 feet off the bottom of the trench and top extends 18 inches above ground)

Water conditions: Wet \_\_\_\_ Dry \_\_\_\_, If wet is pumping operation in effect? \_\_\_\_\_

If Confined Space/Manhole entry is required, a separate Confined Space Entry Permit must be completed along with atmospheric testing and documentation.

Are employees exposed to vehicular traffic? \_\_\_\_\_ (If yes are all warning signs and protective vests in use? \_\_\_\_\_)

Is the spoil pile 2 feet (minimum) from the edge of the excavation? \_\_\_\_\_

**OVERALL CONDITION OF THE EXCAVATION IS SATISFACTORY AND ALL SAFETY  
CONDITIONS HAVE BEEN MET, PERSONNEL ARE SAFE FOR ENTRY**

**TIME:** \_\_\_\_\_ **SIGNED:** \_\_\_\_\_



## CHAPTER – 9

### RESPIRATORY PROTECTION PROGRAM

*01 July, 2012*

#### **POLICY**

The policy of Horry County is to comply with the Occupational Safety and Health standard 29 CFR 1910.134. This standard requires employers to enact operational procedures that will protect employees from respiratory hazards in the workplace.

#### **PURPOSE**

Horry County has determined that employees in the Fire, Police, Parks and Recreation, Public Works, Storm Water, Fleet Maintenance, Airport, Sheriff and Maintenance Departments are exposed to respiratory hazards during routine and tactical operations. These hazards include smoke, dust, particulates, fumes, and vapors, and in some cases represent Immediately Dangerous to Life or Health (IDLH) conditions. The purpose of this program is to ensure that all county employees are protected from exposure to these respiratory hazards.

Engineering controls, such as ventilation and substitution of less toxic materials, are the first lines of defense in Horry County; however, engineering controls have not always been feasible for some of our operations, or have not always completely controlled the identified hazards. In these situations, respirators and other protective equipment must be used. Respirators are also needed to protect employees' health during emergencies. The work processes requiring respirator use in Horry County are outlined in Table 1 of this program.

In addition, some employees have expressed a desire to wear respirators during certain operations that do not require respiratory protection. As a general policy the Department Head will review each of these requests on a case-by-case basis. If the use of respiratory protection in a specific case will not jeopardize the health or safety of the worker(s), the department may provide respirators for voluntary use. As outlined in this program, voluntary respirator use is subject to certain requirements.

## **APPLICABILITY**

This policy applies to all county personnel (permanent, temporary, part-time, volunteers, contractors, sub-contractors, and inmates) who, in the performance of their duties for Horry County, are required to wear respirators during work operations, and during some non-routine or emergency operations such as a spill of a hazardous substance.

In addition, any employee who voluntarily wears a respirator when a respirator is not required is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program, and must be provided with certain information specified in this section of the program. Voluntary use of filtering face-pieces requires only the issuance on Appendix D of the respiratory Protection Standard.

Employees participating in the respiratory protection program do so at no cost to them. The expense associated with training, medical evaluations and respiratory protection equipment will be borne by the county.

## **REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

## **RESPONSIBILITIES**

### **PROGRAM ADMINISTRATOR**

Each Department Head shall be the Program Administrator for their department.

The Program Administrator is responsible for administering the respiratory protection program. Duties of the program administrator include:

- Evaluating the program.
- Coordinating with Risk Management to update the written program, as needed.
- Coordinating with the Risk Management on how to address respiratory hazards or other concerns regarding the program.

## **DEPARTMENT HEADS / SUPERVISORS**

Department Heads are responsible for ensuring that the respiratory protection program is implemented in their department. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation prior to the employee wearing a respirator of any type.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.
- Selection of respiratory protection options.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting fit testing
- Administering the medical surveillance program.
- Maintaining records required by the program.

## **EMPLOYEES**

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees shall:

- Not wear respirators if they have not completed medical evaluation and fit testing and/or have written clearance on file with the Safety Director.
- Care for and maintain their respirators as instructed, and store them in a clean sanitary location.
- Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.

## **PROGRAM ELEMENTS**

### **SELECTION PROCEDURES**

The Department Head will select the type of respirators to be used, based on the hazards workers are exposed to and in accordance with all OSHA standards. The Department Head is responsible for conducting a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:

- Identification and development of a list of hazardous substances used in the workplace, by department, or work process.
- Review of work processes to determine where potential exposures to these hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing process records, and talking with employees and supervisors.

If exposure monitoring to quantify potential hazardous exposures is needed; then monitoring may be contracted out.

*The results of the most recent hazard evaluation (2010) are as follows:*

**Fleet Maintenance:** Adequate ventilation controls most respirable contaminants, however several processes such as welding, grinding, and sanding of metals put the employee at a greater risk of exposure to unknown metal alloy fumes and dust particles. Filtering face pieces (P-95 filters) have been provided for employee use.

**Public Works:** Day to day exposures to chemicals are not normal, however when cutting concrete, pipes, and other tasks that generate high levels of dust (silicates) employees will wear filtering face pieces (P-95 filters) that have the ability to effectively filter the contaminants (also wet cut method is required) while providing the highest comfort factor for the employee. Entry into Confined spaces are monitored and ventilated to remove potentially hazardous atmospheres.

**Storm Water:** Day to day exposures to chemicals are not normal, however when cutting concrete, pipes, and other tasks that generate high levels of dust employees may voluntarily wear filtering face pieces that have the ability to effectively filter the contaminants while providing the highest comfort factor for the employee. Entry into Confined spaces are monitored and ventilated to remove potentially hazardous atmospheres. Seasonal mosquito spraying may introduce high levels of cholinesterase inhibitors to persons handling malithion. These individuals are supplied with half-mask respirators with appropriate cartridges.

**Parks and Recreation:** Exposures to chemicals are out of the norm. Primarily these employees are subjected to dust and pollen while cutting grass and maintaining playgrounds. Voluntary use of filtering face pieces has the ability to effectively filter the contaminants while providing the highest comfort factor for the employee.

**Police/Sheriff Department:** Exposures to chemicals are out of the norm. Primarily these employees are trained and fitted for contingency operations. Full face piece respirators with appropriate filters for tear gas, riot agent, and hazardous materials calls are maintained for use in the event of an emergency or Hazmat incident. Detention Center employees are required to use SCBA respirators to evacuate prisoners in the event of emergency. Detention Center Maintenance Staff are required to wear half face-piece respirators to control exposure to dust's, fumes, and aerosols.

**Fire Department:** Exposures to chemicals are very real possibilities. Employees are subjected to dust and pollen while cutting grass. Voluntary use of filtering face pieces has the ability to effectively filter these contaminants while providing the highest comfort factor for the employee. Responding to medical calls puts firemen at risk of possible exposure to patients with tuberculosis and other respirable diseases, in these scenarios voluntary use of a filtering face piece is highly recommended. Possible entry into Confined spaces during rescue operations exists; entry is always monitored and ventilated to remove potentially hazardous atmospheres. Entry into an area that cannot be adequately ventilated requires employees to wear SCBA units. Structural fire fighting requires the use of SCBA equipment as well as responding to HAZMAT incidents.

## UPDATING THE HAZARD ASSESSMENT

The Department Head must revise and update the hazard assessment as needed (i.e., any time work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Department Head. The Department Head will evaluate the potential hazard, arranging for outside assistance if necessary. The Department Head will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks and this program will be updated accordingly.

## NIOSH CERTIFICATION

All respirators and respiratory protection components (filters) must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. All filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

## RESPIRATOR USE

Respiratory protection is required for the following personnel and processes:

<b>TABLE 1: REQUIRED RESPIRATOR USE</b>		
<b>Respirator</b>	<b>Department</b>	<b>Process</b>
Half-face piece APR with organic vapor cartridge	All Departments	Welding / Grinding
Half-face piece APR with organic vapor cartridge	Storm Water	Handling Malithion
Half-face piece APR with organic vapor cartridge	Parks & Recreation / Public Works	Spraying weed killer
Half-Mask, filtering face piece P/N-95	Public Works	Concrete Cutting
Full-face piece APR with CBRN filter, (NIOSH APPROVED)	Police Dept.	CBRN Threat
Full-face piece APR with CBRN filter, (NIOSH APPROVED)	Sheriff Dept.	CBRN Threat
<b>SCBA or SAR</b> , pressure demand, with auxiliary SCBA	Sheriff Dept.	Emergency Evacuation
Half-face piece APR with appropriate cartridge	Sheriff Dept.	Welding, Grinding, Painting
<b>SCBA or SAR</b> , pressure demand, with auxiliary SCBA	Fire Department	IDLH Confined Space Rescue
Filtering Face-piece of N-95 or greater	Fire Department	Exposure to sick patients

**VOLUNTARY RESPIRATOR USE**

Horry County will provide respirators at no charge to employees for voluntary use for the following work processes:

Filtering face pieces will be available for personnel cutting grass or working in dusty conditions.

Filtering face pieces will be available for emergency services personnel responding to medical calls to use at their discretion for protection from Tuberculosis and other infectious diseases.

Employees who voluntarily wear filtering face pieces (dust masks) are not subject to the medical evaluation, cleaning, storage, and maintenance provisions of this program.

<b>TABLE 2: VOLUNTARY RESPIRATOR USE</b>		
<b>Respirator</b>	<b>Department</b>	<b>Process</b>
<b>FILTERING FACEPIECE (DUST MASK)</b>	<b>ALL DEPARTMENTS</b>	Responding to medical calls to use at their discretion for protection from Tuberculosis and other infectious diseases Grass Cutting, Dust, Cutting Concrete,

**The Department Head will provide all employees who voluntarily choose to wear the above respirators with a copy of Appendix D of the standard. (Appendix D details the requirements for voluntary use of respirators by employees.) (Included as last page of this policy)**

**Employees choosing to voluntarily wear a half face-piece APR must comply with the procedures for Medical Evaluation, Respirator Use, and Cleaning, Maintenance and Storage.**

**The Department Head shall authorize voluntary use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of the medical evaluations.**

## **MEDICAL EVALUATION**

Employees who are either required to wear respirators, or who choose to wear an APR voluntarily, must pass a medical exam before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use.

Medical evaluation procedures are as follows:

The medical evaluation will be conducted using the questionnaire provided in Appendix C of the Respiratory Protection Standard. The Department Head or testing company will provide a copy of this questionnaire to all employees requiring medical evaluations.

To the extent feasible, the Department Head will assist employees who are unable to read the questionnaire (by providing help in with the questionnaire). When this is not possible, the employee will be sent directly to the physician for medical evaluation.

All affected employees will be given a copy of the medical questionnaire to fill out.

Employees will be permitted to fill out the questionnaire on company time.

Follow-up medical exams, if necessary, will be granted to employees. Doctors Care is the designated physician for follow-up medical examinations.

All employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.

The Department Head will provide Doctor's Care physicians with a copy of this program, a copy of the Respiratory Protection standard, the list of hazardous substances by work area, and for each employee requiring evaluation: his or her work area or job title, proposed respirator type and weight, length of time required to wear respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.

Any employee required for medical reasons to wear a positive pressure air-purifying respirator will be provided with a powered air purifying respirator.

After an employee has received clearance, completed fit testing, and begun to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:

- Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- Any competent medical clinic / physician or supervisor informs the Program Administrator that the employee needs to be reevaluated;
- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation;
- A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

The department head should maintain a current list of employees currently included in medical surveillance.

All examinations and questionnaires are to remain confidential between the employee and the physician.



## **FIT TESTING**

Fit testing is mandatory for employees *required* to wear respirators of any type in the performance of their duties. Employees that voluntarily wearing tight fitting APRs shall also be fit tested. Employee's voluntarily wearing filtering face-pieces (dust masks) will be fit tested only if they request it.

Employees who are *required* to wear respirators shall be fit tested:

- Prior to being allowed to wear any respirator.
- Annually.
- When there are changes in the employee's physical condition that could affect respiratory fit (e.g., obvious change in body weight, facial scarring, etc.).

Employees will be fit tested with the exact make, model, and size of respirator(s) that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find an optimal fit. Fit testing of PAPR's is to be conducted in the negative pressure mode.

The Department Head will ensure that fit tests are conducted following the OSHA approved Protocols.

## **GENERAL USE PROCEDURES:**

Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.

All employees shall conduct user seal checks each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them) specified in Appendix B-1 of the Respiratory Protection Standard.

All employees shall be permitted to leave the work area to go to the locker room to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees should notify their supervisor before leaving the area.

Employees are not permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures, that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the face piece-to-face seal.

## **EMERGENCY PROCEDURES:**

Horry County conducts no operations that pose a foreseeable risk to require emergency escape from work areas.

## **RESPIRATOR MALFUNCTION**

APR Respirator Malfunction: For any malfunction of an APR (e.g., such as breakthrough, face piece leakage, improperly working valve, or clogged filters), the respirator wearer should immediately vacate the area, inform his/her supervisor that the respirator no longer functions as intended, and go to the designated safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.

Atmosphere-supplying Respirator Malfunction: All workers wearing atmosphere-supplying respirators will work with a safety monitor. If a worker experiences a malfunction of an SAR, he or she should signal to the safety monitor that he or she has experienced a respirator malfunction, and begin an immediate evacuation of the hazardous area. The safety monitor shall guide the worker out or initiate a non-entry rescue utilizing a lifeline, and summon assistance from the Randleman Fire-Rescue.

Self Contained Breathing Apparatus: Firemen experiencing an SCBA malfunction should immediately notify their partner and initiate an emergency evacuation of the hazardous area.

## **IDLH PROCEDURES**

The Program Administrator has identified the following area as presenting the potential for IDLH conditions:

- Structural Fire Fighting
- Confined Space Entry
- Sewer/Storm Water Entry

## **AIR QUALITY**

For atmosphere supplying respirators, compressed breathing air shall meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989.

Horry County Fire Rescue maintains an air charging capability for compressed breathing air. Tested quarterly by Lawrence Factor (X-Zam Laboratories), the system currently supplies Grade –E compressed breathing air.

## **CLEANING, MAINTENANCE, CHANGE SCHEDULES AND STORAGE**

### **CLEANING**

Respirators are to be regularly cleaned and disinfected by the user; after each shift if worn by others.

Respirators issued for the exclusive use of an employee shall be cleaned as often as necessary.

Atmosphere supplying and emergency use respirators are to be cleaned and disinfected after each use.

The following procedure is to be used when cleaning and disinfecting respirators:

- Disassemble respirator, removing any filters, canisters, or cartridges.
- Wash the face piece and associated parts in a mild detergent with warm water. Do not use organic solvents.
- Rinse completely in clean warm water.
- Wipe the respirator with disinfectant wipes (70% Isopropyl Alcohol) to kill germs.
- Air-dry in a clean area.
- Reassemble the respirator and replace any defective parts.
- Place in a clean, dry plastic bag or other air tight container.

Note: The Department Head will ensure an adequate supply of appropriate cleaning and disinfection material at the cleaning station. If supplies are low, employees should contact their supervisor, who will inform the Department Head.

## MAINTENANCE

Respirators are to be properly maintained at all times in order to ensure that they function properly and adequately protect the employee. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer. Repairs to regulators or alarms of atmosphere-supplying respirators will be conducted by the manufacturer.

The following checklist will be used when inspecting respirators:

Face piece:

- cracks, tears, or holes
- facemask distortion
- cracked or loose lenses/face shield

Head straps:

- breaks or tears
- broken buckles

Valves:

- residue or dirt
- cracks or tears in valve material

Filters/Cartridges:

- approval designation
- gaskets
- cracks or dents in housing
- proper cartridge for hazard

Air Supply Systems:

- breathing air quality/grade
- condition of supply hoses
- hose connections
- settings on regulators and valves

Employees are permitted to leave the work area to perform limited maintenance on their respirator in an area that is free of respiratory hazards. Situations when this is permitted include: to wash their face and respirator face piece to prevent any eye or skin irritation, to replace the filter, cartridge or canister, and if they detect vapor or gas breakthrough or leakage in the face piece or if they detect any other damage to the respirator or its components.

## **CHANGE SCHEDULES**

Employees wearing any type respirator shall change the cartridges on their respirators when they first begin to experience difficulty breathing (i.e., resistance) while wearing their masks, or when working life has been met. When new cartridges are installed they shall be marked to identify in-use date and expiration date with magic marker on a conspicuous area of filter.

## **STORAGE**

Respirators must be stored in a clean, dry area, and in accordance with the manufacturer's recommendations. Each employee will clean and inspect their own air-purifying respirator in accordance with the provisions of this program and will store their respirator in a plastic bag in their own locker/desk or readily available area. Each employee will have his/her name on the bag and that bag will only be used to store that employee's respirator.

Department heads will be responsible for storing respirators and respirator components in their original manufacturer's packaging in their respective work areas.

## **DEFECTIVE RESPIRATORS**

Respirators that are defective or have defective parts shall be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his or her supervisor. Supervisors will give all defective respirators to the Department Head. The Department Head will decide whether to:

- Temporarily take the respirator out of service until it can be repaired.
- Perform a simple fix on the spot such as replacing a head strap.
- Dispose of the respirator due to an irreparable problem or defect.

When a respirator is taken out of service for an extended period of time, the respirator will be tagged out of service, and the employee will be given a replacement of similar make, model, and size. All tagged out respirators will sent to the Department Head.

## **TRAINING**

The Department Head will provide training to respirator users and their supervisors on the contents of the Horry County Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervising employees that must wear respirators.

The training course will cover the following topics:

- Respiratory Protection Program
- OSHA Respiratory Protection standard
- respiratory hazards encountered and their health effects
- proper selection and use of respirators
- limitations of respirators
- respirator donning and user seal (fit) checks
- fit testing
- emergency use procedures
- maintenance and storage
- medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (e.g., if they change departments and need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training through hands-on exercises and a written test. The Program Administrator will document respirator training to include; the type, model, and size of respirator for which each employee has been trained and fit tested.

## **PROGRAM EVALUATION**

The Department Head should conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations should include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records.

Problems identified should be addressed by the Department Head.

## **DOCUMENTATION AND RECORDKEEPING**

A written copy of this program and the OSHA standard is kept in the Department Head's office and is available to all employees who wish to review it.

Also maintained by the Department Head are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

The Department Head will also maintain copies of the medical records for all employees covered under the respirator program. The completed medical questionnaire and the physician's documented findings are confidential and will remain with Doctor's Care. The county will only retain the physician's written recommendation regarding each employee's ability to wear a respirator.

## Attachment 1

### Appendix D to Sec. 1910.134

#### **(Mandatory) Information for Employees Using Respirators When Not Required Under the Standard**

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998]



## CHAPTER – 10

### HEARING CONSERVATION PROGRAM

*01 July, 2012*

#### **POLICY**

The policy of Horry County is to comply with the Occupational Safety and Health standard 29 CFR 1910.95. This standard requires employers to administer a continuing and effective hearing conservation program whenever employee noise exposures exceed certain levels.

#### **PURPOSE**

Horry County has determined that employees in the following departments are exposed to hazardous noise levels during daily operations:

Airport	Fleet Maintenance	Public Works
Animal Care Center	Human Resources	Recreation
Code Enforcement	Maintenance	Storm Water
Emergency Management	Museum	Sheriff
Fire Rescue	Police	Detention Center

The purpose of this program is to ensure that all county employees are protected from exposure to hazardous noise.

Engineering controls are the first lines of defense in Horry County; however, engineering controls have not always been feasible for some of our operations, or have not always completely controlled the identified hazards. In these situations, Administrative controls and/or personal protective equipment must be used. The work processes requiring hearing protection use in Horry County are outlined in each departments written hazard assessment.

#### **APPLICABILITY**

This policy applies to all county personnel (permanent, temporary, part-time, volunteers and sub-contractors) who, in the performance of their duties for Horry County, are exposed to hazardous noise levels. These personnel are required to wear hearing protection while performing tasks identified in each departments written hazard assessment, and at anytime noise exceeds normal conversation volume (85 decibels).

#### **REFERENCE**

This policy and all Standard Operating Procedures have been derived directly from Occupational Safety and Health Act-Standard 29 CFR parts 1910 and 1926.

## **RESPONSIBILITIES**

### **PROGRAM ADMINISTRATOR**

The Department Head shall be the Hearing Conservation Program Administrator for their department. The Program Administrator is responsible for administering the hearing protection program. Duties of the program administrator include:

- Identifying and evaluating work areas, processes or tasks that present hazards.
- Assisting workers with selection of hearing protection.
- Monitoring use of hearing protection to ensure proper wear and use.
- Coordinating with Risk Management to evaluate and update the program annually or as needed.
- Coordinating with Risk Management on how to address noise hazards or other concerns regarding the program.
- Coordinating with Human Resources Department on Audiometric Testing contracts.

### **DEPARTMENT HEADS / SUPERVISORS**

Department Heads and Supervisors are responsible for ensuring that the Hearing Conservation Program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, Department Heads must also ensure that the program is understood and followed by the employees under their charge. Duties include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fitting, and audiometric testing.
- Ensuring the availability of appropriate hearing protection and accessories.
- Being aware of tasks requiring the use of hearing protection.
- Enforcing the proper use of hearing protection when necessary.
- Ensuring that hearing protectors are properly cleaned, maintained, and stored to ensure availability when needed.
- Continually monitoring work areas and operations to identify noise hazards
- Arranging for and/or conducting training.
- Scheduling and coordinating audiometric testing, and follow up examinations.
- Maintaining records required by the program.
- Coordinating with Risk Management on how to address noise hazards or other concerns regarding the program.

### **EMPLOYEES**

Each employee has the responsibility to wear his or her hearing protection when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their hearing protection as instructed to ensure availability when needed.
- Inform their supervisor if their hearing protection is defective or fails to provide adequate comfort or protection.

- Inform their supervisor or the Program Administrator of any noise hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.

## **PROGRAM ELEMENTS**

### **MONITORING**

Monitoring (sampling) shall be accomplished to identify equipment, facilities, and processes that might present a noise hazard to employees. The overall objective in sampling is to ensure all employees that experience exposure to noise above 85db are included in the hearing conservation plan, and in the proper selection of hearing protection.

All continuous, intermittent, and impulsive sound levels from 80 to 130 decibels shall be included in the noise measurements for hazard identification. All readings at or above 85db shall constitute a requirement for hearing protection.

Due to worker mobility and the variety of equipment used no single reading can set the standard for county employees. Each equipment item/facility shall be identified in each departments Written Hazard Assessment to show what type hearing protection is required.

Horry County maintains an Extech Instruments Noise Dosimeter Model 407355 digital sound meter for the purpose of sampling and recording noise measurements. This instrument shall be calibrated prior to testing to ensure accuracy.

Monitoring shall be re-accomplished whenever a change occurs in workplace exposure that might present a hazard to additional personnel or that might render current protection inadequate.

### **EMPLOYEE NOTIFICATION**

The Department Head shall notify each employee that is exposed to noise hazards of 85db or greater and shall place them on the hearing conservation program.

### **OBSERVATION OF MONITORING**

The Department Head shall provide each employee with an opportunity to observe any noise measurements taken in their work areas.

## **AUDIOMETRIC TESTING PROGRAM**

Each affected department will establish and maintain an audiometric testing program and provide testing to all employees that are exposed to noise levels of 85 decibels or greater.

This program will be provided at no cost to employees.

Audiometric tests shall be performed by a provider that meets the requirements of 1910.95.

A valid baseline audiogram must be obtained within 1 year of an employee's first exposure at or above the action level. Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wear hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

The Department Head shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

At least annually after obtaining the baseline audiogram, each affected department shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.

Each employee's annual audiogram shall be compared to his or her baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. The company performing the testing shall complete this comparison.

If the annual audiogram shows that an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

The audiologist, otolaryngologist, or physician shall review problem audiograms and shall determine whether there is a need for further evaluation.

## **FOLLOW-UP PROCEDURES**

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift (as defined in paragraph (g)(10) of 1910.95) has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:

- Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.
- Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.

The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, the employer:

- Shall inform the employee of the new audiometric interpretation.
- May discontinue the required use of hearing protectors for that employee

"Revised baseline:" An annual audiogram may be substituted for the baseline audiogram when, in the judgment of the audiologist, otolaryngologist or physician who is evaluating the audiogram:

- The standard threshold shift revealed by the audiogram is persistent; or
- The hearing threshold shown in the annual audiogram indicates significant improvement over the baseline audiogram.

## **STANDARD THRESHOLD SHIFT**

A standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Appendix F: "Calculation and Application of Age Correction to Audiograms."

## **HEARING PROTECTORS**

Each affected department shall make hearing protectors available to all employees that are exposed to noise levels of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.

Department Heads shall ensure that hearing protectors are worn:

- By an employee who is required by this policy to wear personal protective equipment
- By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:
  - Has not yet had a baseline audiogram
  - Has experienced a standard threshold shift

Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.

The Department Head shall provide training in the use and care of all hearing protectors is provided to employees.

The Department Head shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

## **HEARING PROTECTOR ATTENUATION**

The Safety Manager shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The employer shall use one of the evaluation methods described in 29 CFR-1910.95, Appendix B: "Methods for Estimating the Adequacy of Hearing Protection Attenuation."

Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by 29 CFR-1910.95.

For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below.

The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. The Department Head shall provide more effective hearing protectors as needed.

## **TRAINING PROGRAM**

The affected Department Head shall institute a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels, and shall ensure employee participation in such program.

The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

The training program shall ensure that each employee is informed of the following:

- The effects of noise on hearing
- The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care
- The purpose of audiometric testing, and an explanation of the test procedures

## **ACCESS TO INFORMATION AND TRAINING MATERIALS**

The Department Head shall make available to affected employees or their representatives copies of this standard and shall also post a copy in the workplace.

The Department Head shall provide to affected employees any informational materials pertaining to the standard that are supplied to the employer by the Assistant Secretary.

The Department Head shall provide, upon request, all materials related to the employer's training and education program pertaining to this standard to the Assistant Secretary and the Director or South Carolina Department of Labor.

## **RECORDKEEPING**

The affected Department Head shall maintain an accurate record of all employee exposure measurements.

A written copy of this program and the OSHA standard is kept in the Department Head's office and is available to all employees who wish to review it.

The Department Head shall retain all employee audiometric test records.

This record shall include:

- Name and job classification of the employee
- Date of the audiogram
- The examiner's name
- Date of the last acoustic or exhaustive calibration of the audiometer
- Employee's most recent noise exposure assessment

The Department Head shall require the contractor providing audiometric testing to maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms, and to present this information to authorities as needed.

"Record retention:" The Department Head shall retain records required in this paragraph (m) for at least the following periods:

- Noise exposure measurement records shall be retained for two years.
- Audiometric test records shall be retained for the duration of the affected employee's employment.

"Access to records:" All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary or South Carolina Department of Labor. The provisions of 29 CFR 1910.20 (a)-(e) and (g)-apply to access to records under this section.

## **PROGRAM EVALUATION**

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use hearing protection and their supervisors, site inspections, sound level monitoring and a review of records.

Problems identified will be noted in an inspection log and addressed by the Program Administrator. These findings will be reported to management, and the report will list plans to correct deficiencies in the hearing protection program and target dates for the implementation of those corrections.