

BRUNSWICK COUNTY SAFETY MANUAL

PREPARED FOR BRUNSWICK COUNTY EMPLOYEES
BY
BRUNSWICK COUNTY SAFETY REVIEW TEAM

TABLE OF CONTENTS

<u>SECTION I</u>	<u>STANDARD PROCEDURES & PROCESSES</u>	<u>3</u>
SAFETY STATEMENT & POLICY		3
RISK MANAGEMENT		8
NORTH CAROLINA GENERAL STATUTE		11
GENERAL WORKPLACE SAFETY RULES.....		12
WORKER'S COMPENSATION PLAN		13
ACCIDENT /INJURY REPORTING		15
RETURN TO WORK PLAN.....		19
AUTO/PROPERTY DAMAGE REPORTING		21
MINIMUM INSURANCE COVERAGE REQUIREMENTS		23
 <u>SECTION II</u>	 <u>OCCUPATIONAL SAFETY AND HEALTH COMPLIANCE</u>	 <u>25</u>
BLOODBORNE PATHOGENS		25
COMMERCIAL DRIVER'S LICENSE DRUG ALCOHOL TESTING.....		34
CONFINED SPACE ENTRY PROCEDURE.....		38
DRIVING QUALIFICATIONS & EQUIPMENT OPERATIONS		45
ELECTRICAL SAFETY		59
ERGONOMIC WELLNESS		60
FALL PROTECTION.....		61
FIRST AID		62
FITNESS FOR DUTY.....		62
GLOBAL HARMONIZATION SYSTEM (FORMERLY RIGHT TO KNOW ACT)		64
HEARING CONSERVATION.		67
LAB SAFETY		68
LOCK OUT / TAG OUT PROCEDURES.....		76
MATERIALS HANDLING.....		95
OFFICE SAFETY		98
PERSONAL PROTECTIVE EQUIPMENT PROGRAM		99
RECORDKEEPING AND REPORTING INJURIES		100
RESPIRATORY PROTECTION PROGRAM		100

HAZARD IDENTIFICATION, ASSESSMENT AND CONTROL	109
JOB HAZARD ANALYSIS	109
SAFETY INSPECTIONS	110
RECORDKEEPING AND REPORTING INJURIES.....	111
SAFETY SHOE PROGRAM	112
SAFETY TRAINING	113
SAFETY TRAINING CALENDAR	113
TRENCHING AND EXCAVATION SAFETY POLICY.....	114
WORKPLACE VIOLENCE	122
 <u>SECTION III</u> <u>EMERGENCY ACTION PLANNING</u>	 123
EMERGENCY ACTION PLAN	123
ADVERSE WEATHER CONDITIONS	124
BOMB THREAT	124
EMERGENCY EVACUATION	125
FIRE.....	126
FLOOD	127
GAS LEAK.....	127
HAZARDOUS MATERIALS	127
SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN	128
 <u>SECTION IV</u> <u>APPENDIX</u>	 185
SAFETY INSPECTION REPORT	186
OUTSIDE STORAGE AREA INSPECTION FORM	193
GARAGE AREA INSPECTION REPORT.....	195
INSPECTION REPORT FUEL TANK DISPENSING AREA.....	198
INSPECTION REPORT WELDING SHOP AREA.....	200
LOCK OUT / TAG OUT SAMPLE CONTROL PROCEDURES.....	204
PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT.....	208
TRAINING - PROPER USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE).....	211
DRIVER'S VEHICLE INSPECTION REPORT	217

SECTION I STANDARD PROCEDURES AND PROCESSES



BRUNSWICK COUNTY SAFETY STATEMENT

It is the intent of Brunswick County to provide a safe environment for the employees and public they serve. Safety hazards and potential loss situations can be minimized through the involvement of the management team, supervisors and employee involvement in cooperation with safety programs.

All employees are expected to cooperate in safe practices by adhering to the safety regulations and guidelines of the Brunswick County Safety Manual while performing their duties.

The County Manager shall set the direction and enforcement of safety and health programs. This role includes approval of safety policies and programs. The Department Directors, Division Heads and Supervisors are responsible for developing proper attitudes that support a safety culture in themselves and in those they supervise.

All employees have a responsibility to work safely, use protective equipment and comply with Brunswick County's Safety Programs. Employees are encouraged to participate and give suggestions for improvement through department meetings, during discussions with supervisors or the Safety Review Team at any time.

The establishment of a Safety Review Team and sub-committees composed of representatives from various departments of the County, with regularly scheduled safety meetings will demonstrate and support the safety culture of Brunswick County. Each new employee will be required to attend a new employee orientation provided by the Human Resources Department. Orientation will provide the introduction to the safety culture, specific safety rules and programs outlined in this document. Further, training specific to their occupation, designated environment and work group will be provided at the department level and closely supervised until it is ascertained that he/she is fully capable of performing his/her duties in a safe manner.

Brunswick County's vision of an injury free workplace can be achieved through establishment of and compliance with safe work practices and procedures. The prevention of bodily injury and safe guarding of health are the first considerations in all workplace actions and are the responsibility of every employee at every level.

Chairman, Brunswick County Commissioners

Date

Randell Woodruff

Brunswick County Manager

Date

The Safety Manual will be available in each department and on-line on the County's website (www.brunswickcountync.gov).

BRUNSWICK COUNTY PERSONNEL MANUAL SAFETY POLICY

SECTION V PERSONNEL STANDARDS

Policy #530 SAFETY

PURPOSE: Brunswick County employees have a right to work in safe surroundings. Brunswick County is strongly committed to providing a safe workplace.

SCOPE: This policy presents the County's commitment to safety, as well as a description of safety programs and procedures. It includes supervisor and employee responsibilities, accident reporting procedures, safety training, inspections, use of protective equipment and penalties for violations of safety rules.

POLICY AND PROCEDURE:

1. **ORGANIZATIONAL COMMITMENT TO SAFETY**
 - 1.1 The County is committed to maintaining a safe and healthful environment for its employees, and will take the following actions to ensure that this commitment is carried out:
 - 1.1.1 Monitor County activities to identify safety and health risks.
 - 1.1.2 Take whatever steps are necessary to minimize risks that are discovered.
 - 1.1.3 Communicate County policy and programs to all employees and relevant government agencies.
 - 1.1.4 Encourage employee awareness of safety and health risks, and encourage employees to report any violations of policy or new risks that he/she may observe.
 - 1.1.5 Plan new procedures or facilities with safety as a primary goal.
 - 1.1.6 Comply with all ADA and all state and federal requirements.
 - 1.1.7 Provide to employees and visitors any health or safety equipment that is needed to minimize risk and/or satisfy government requirements. If damaged or excessively worn, such equipment will be promptly replaced. No employee may work without wearing designated safety equipment.
 - 1.1.8 Not discriminate against or discharge any employee for initiating proceedings against the County, testifying before any government agency, or exercising any right provided by any government agency relating to our health and safety practices.

- 1.1.9 Fully inform all new or prospective employees of any health hazards related to his/her job or to working on County premises.

2. RESPONSIBILITIES OF THE COUNTY SAFETY COMMITTEE/ SAFETY OFFICER

- 2.1 The County Safety Committee / Officer is appointed by the County Manager and is responsible for the development and maintenance of the organization's safety programs. The Safety Committee / Officer's specific responsibilities include:
 - 2.1.1 Ensuring compliance with all safety-related regulations of federal, state, and local governments.
 - 2.1.2 Conducting regular formal and informal safety inspections of all County work areas to ensure that County policies are being followed and to seek out any new sources of health or safety risk.
 - 2.1.3 Representing the County in relations with government agencies affecting health and/or safety, including on-site inspections. It is the policy of the County to cooperate fully with agencies that monitor compliance with health and safety regulations.
 - 2.1.4 Developing and carrying out training and retraining programs in safety and health practices for all employees, as required, or in excess of the requirements of government agencies.
 - 2.1.5 Keeping records of safety policies, practices and procedures as prescribed by government regulations.
 - 2.1.6 Posting any notices or records that may be of interest to employees or that are required by government agencies.
 - 2.1.7 Receiving and acting on any violations of policy or observations of health or safety risks that may be reported.
 - 2.1.8 Making sure County equipment is in safe working order.

3. RESPONSIBILITIES OF SUPERVISORS

- 3.1 All personnel who directly supervise one or more employees hold the following health and safety related responsibilities:
 - 3.1.1 General knowledge of health and safety related procedures for all areas under his/her control.
 - 3.1.2 Inspect his/her work areas regularly to monitor compliance with policies. Train or

arrange health and safety training for all employees.

- 3.1.3 Discipline any employee who violates health or safety procedures.
- 3.1.4 Supply Safety Committee / Officer with any information requested.
- 3.1.6 Cooperate with Safety Committee / Officer in communicating and implementing new policies and in preparing for official inspections.
- 3.1.7 Report violations of policy to Safety Committee / Officer.

4. RESPONSIBILITIES OF EMPLOYEES

- 4.1 Each employee of the County holds the following health and safety-related responsibilities:
 - 4.1.1 Follow all County health and safety-related policies and procedures.
 - 4.1.2 Report any violation of policy to the County Committee Safety / Officer.
 - 4.1.3 Work only with tools and equipment that are in proper working order. Report any damaged or malfunctioning equipment immediately to the supervisor.
 - 4.1.4 Always wear proper safety equipment.
 - 4.1.5 Keep work areas clean and neat.
 - 4.1.6 Immediately report any work-related accident, injury or illness to the Safety Committee / Officer.

5. PENALTIES FOR VIOLATION OF SAFETY RULES

- 5.1 Any employee of the County who violates a health or safety policy will be subject to disciplinary procedures as described in Section II, Policy #250 of this manual.

BRUNSWICK COUNTY SAFETY PROGRAM

Specific organizational safety goals and performance standards have been established to incorporate incentives for departments and individuals to recognize improvements in workplace safety.

Expected Outcome

- Reduced employee injury
- Improve safety awareness
- Reduction in claims cost

Safety Standards

- Performance Indicators
- Recognition Methods

Performance Indicators

In order to achieve the desired results, reduced employee injury and program cost containment, the measurement components chosen are directly related to one another and provide benchmarks for productivity and profitability for the organization.

- Prompt Reporting – tracks the number of days in which a department reports a workplace accident. This enables each department to follow accident reporting procedures; get medical attention promptly, contain costs and identify cause of injury
- Early Return to Work – uses current Return to Work program to support injured employees by following the treating physician's recommendation until fully duty is achieved. This also allows the organization to minimize indemnity dollars spent on workplace injuries.
- Days Away Restricted Transferred – using the industry standard equation to measure days away from work, enables the organization to compare industry data and measure annual successes. Days Away Restricted or Transferred will be measured within the organization, annually by the use of the standard industry formula;

$$\frac{\text{Lost Time Acc.} \times 200,000}{\text{Hrs. Worked}} = \text{Incident Rate}$$

- Severity Rate – captures cost of claims paid annually by organization. Use of this benchmark tool will capture the loss ratio for the organization. This will also assist in determining reserves to fund the program going forward. Building up reserves will provide for a financially sound plan while departments showing improvements in focus areas for new and/or protective equipment purchases.

$$\frac{\text{Total Cost of Claims} \times 200,000}{\text{Hrs. Worked}} = \text{Severity Rate}$$

Department heads will be given data relating to key safety performance indicators. Each Department Director should provide feedback to employees in areas where improved worker safety is needed. Directors may request from Risk Management additional training or safety data as needed.

Recognition Methods *(The following is an example of one recognition method)*

Brunswick County actively supports methods of recognition for increasing worker safety while reducing the direct and indirect costs of accidents and injuries. This safety program encourages departments to improve safety by providing total performance in four focus areas for the calendar year. Each department showing improvements by a previously agreed upon percentage over the previous years' four focus areas, will be recognized by one or more of the following methods depending on the significance of improvement;

- Recognized by the Commissioners and County Manager in a public forum.
- Marquee displayed in front of Brunswick County Government Center announcing achievements
- Departments with improvements in the focus areas will be eligible for the maximum percentage allowable for safety in the performance appraisal system
- Presentation of a plaque stating the achievements of the department
- Upon County Manager's approval; once significant improvements in focus areas are obtained in departments, a portion of departmental savings can be disbursed for the purchase of new and/or protective equipment

Recognition Eligible Departments - Safety Incentives will include all Brunswick County Departments whose payroll is disbursed from the County Finance Department.

RISK MANAGEMENT

1. Risk Manager

- 1.1 Brunswick County's Risk Manager is appointed by the County Manager and is responsible for:
 - 1.1.1 Development and implementation of the organization's safety programs.
 - 1.1.2 Bind insurance coverage for activities the County of Brunswick engages in to protect people, property and the environment.
 - 1.1.3 Ensure compliance with Federal, State and Local laws as they pertain to occupational safety.
 - 1.1.4 Represent the County in relations with government agencies affecting occupational safety and health. Upholding the position of the County by asserting compliance.
 - 1.1.5 Analyze reports and disseminate information concerning safety issues.
 - 1.1.6 Conducts and/or assists in inspections of all County facilities.
 - 1.1.7 Conduct and/or assists in district wide safety training activities.
 - 1.1.8 Implement the formation and direct the activities of a Brunswick County Safety Review Team, focusing on accident prevention.

2. Responsibility of the Safety Review Team/Mission Statement

- 21 Brunswick County's Safety Review Team will work to maintain a primary focus of accident prevention. By providing leadership in the field of safety to employees through training, education and benchmarking safety performance; accidents can be minimized. Controlling hazards throughout the organization gives employees a safety culture where prevention is paramount and value is a workplace tool.
- 22 The Safety Review Team is comprised of department directors, employees and supervisors. They are charged with upholding compliance and review of activities to ensure safety for all employees of Brunswick County. Responsibilities of the Safety Review Team are:
 - 2.2.1 Review and/or investigate all accidents and provide recommendations for corrective action.
 - 2.2.2 Create and maintain a high level of interest in and awareness of safety among all employees.
 - 2.2.3 Develop safety policies and procedures for the Brunswick County Employee Safety Manual.
 - 2.2.4 Conduct inspections of all County facilities and recommend corrections for areas of noncompliance, if any.
 - 2.2.5 Encourage feedback from all employees in every area of the County with regard to problems, ideas and solutions related to safety.
 - 2.2.6 Inform employees about new safety policies, training programs and other safety related matters.

3. Membership of the Safety Review Team

- 31 In order to promote safety programs in all occupational work groups, the safety committee shall have management level representation from various departments throughout the County. Members are appointed to a two-year term, however, they can opt to serve longer, provided the member group agrees and their work is focused on the goals of the Safety Review Team for the good of the organization as a whole. When a member is failing to perform the duties of the Team, it is brought to the full attention of the Team for recommendation of improvement or replacement. When a member is rotating off the Team, they will do so at the end of each calendar year unless extenuating circumstances prevail. All members serving on the Safety Review Team shall be approved by the County Manager.
- 32 The Risk Manager shall be a constant advisory member of the Team. Meetings shall be the first Thursday of each month at a location agreed upon by the Team; special meetings may be called as needed. The assigned roles will be a facilitation style as follows: meeting leader, timekeeper, meeting coach, recorder, gatekeeper, scribe and ground rules judge. Each of the duties is detailed in the assigned roles for team meetings. Annually, there will be a retreat to informally evaluate each committee member and a review of the committee work during the past year, as well as identify goals for the upcoming year. This is to ensure the focus remains and the team is a productive work group serving Brunswick County employees and citizens.

4. Order of Business for the Safety Review Team

- 41 Each meeting may consist of an agenda as follows: review of prior meeting minutes, action item updates, new business, guest speaker/new member, subcommittee reports and break out sessions. The Team breaks out into the following subcommittees: Loss Control Team, Inspection Team and Policy Review Team. The work of each subcommittee shall be:
- 411 The Loss Control Team will review all accidents occurring within the last 60 day period. They will determine whether an accident was preventable or non- preventable based on the facts given. When questions arise which warrant additional information not provided in the incident report, the employee involved in the incident may be called in to provide a recount of the incident in question. The team will then make recommendations for corrective action, if any. If needed copies of the determination and recommendation are forwarded to the Department Head and County Manager.
 - 412 The Inspection Team will conduct periodic site visits to perform safety audits of the most publicly frequented County owned facilities. The safety audit consists of visual inspections of conditions and processes at a location designated by the team. The safety audits are documented on a Brunswick County Safety Inspection sheet and a copy given to the responsible occupant, with a recommendation for correction of items that are known hazards
 - 413 The Safety Procedure Team is responsible for developing and implementing organizational procedures, inclusive of this Brunswick County Safety Manual. They must establish employee safety as the first priority and hold departments accountable for achieving safe environments and upholding established procedures and/or policies. When writing a safety procedure or policy the team must determine NC OSHA regulations required and other agencies having jurisdiction on said topic, and prepare drafts for the Safety Review Team and affected departments prior to going to County Manager for Board of Commissioner's approval.
- 42 Department Directors are responsible for:
- 421 Establishing and maintaining a safety program within their department.
 - 422 Promoting safe and healthful working conditions and practices within the department.
 - 423 Appointing a staff member or designee to coordinate safety efforts in the department.
 - 424 Ensure that safety procedures pertinent to their department's activities are developed and enforced.
 - 425 Observing safety conditions of the department on a regular basis and remove any recognized hazards.
 - 426 Assuring appropriate training for supervisors, safety coordinator and employees.
 - 427 Assuring that all supervisors/designees complete an employee attendance record for each training event and submit to the departmental safety coordinator.

- 43 Supervisors are responsible for:
- 431 Obtaining a working knowledge of occupational safety laws as they pertain to the work of the employees they supervise.
 - 432 Work with Risk Management to identify safety sensitive occupations, work methods or locations.
 - 433 Providing adequate job training and instructions for their employees to perform daily work assignments in a safe and efficient manner.
 - 434 Observing and evaluate working conditions and equipment. (Use inspection forms in appendix).
 - 435 Correcting any unsafe conditions or unsafe acts found.
 - 436 Encouraging employees to report all unsafe conditions and practices.
 - 437 Promptly investigate all accidents and complete required reports forwarding them the Department Head.
 - 438 Providing counsel when necessary to encourage the safety culture of Brunswick County.
 - 439 Complete an employee attendance record for each training event and submit to the departmental safety coordinator.

NORTH CAROLINA GENERAL STATUTE

Williams- Steiger Safety and Health Act of 1970

To assure safe and healthful working conditions for all working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions by providing for research, information, education and training in the field of occupational safety and health, and for other purposes. An important section of this act is section 5(a)(1) also known as the General Duty Clause. The act states:

- (a) Each employer --
 - (1) shall 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.
- (b) 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.

WORKPLACE SAFETY RULES

1. General

- 1.1 Every employee shall be responsible for supporting the safety culture of Brunswick County by demonstrating an individual commitment to incorporate into the workplace. The following guidelines are established for employees in County work areas:
 - 1.1.1 Job safety is the responsibility of each employee. Exercise good care and judgment to prevent accidents.
 - 1.1.2 Work with tools and equipment that are in proper working order, inspect prior to use.
 - 1.1.3 Report all job-related injuries to your immediate supervisor as soon as possible. Federal and State OSHA regulations and Worker's Compensation laws require prompt reporting of accidents and injuries.
 - 1.1.4 Never compromise safety for expediency.
 - 1.1.5 Attend all department safety training and specialty training required.
 - 1.1.6 Keep your work area clean to decrease hazards. Use inspection forms in appendix.
 - 1.1.7 Employees under a doctor's care taking prescribed medicines, that could negatively affect your performance, must be reported to supervisor.
 - 1.1.8 Traffic safety rules must be observed.
 - 1.1.9 Smoke only in designated areas.
 - 1.1.10 Report to work in appropriate clothing suitable for the type of work performed.
 - 1.1.11 Wear all protective equipment as required.
 - 1.1.12 Obey warning signs and tags. They are posted to point out hazards.
 - 1.1.13 Use the handrails on steps and other elevated areas.
 - 1.1.14 Operate only the equipment and machinery you have been trained and/or authorized to use.
 - 1.1.15 Do not operate equipment or machinery with guards missing or broken.
 - 1.1.16 Never remove or disable any safety device
 - 1.1.17 Never reach over moving parts of equipment or machinery.
 - 1.1.18 Perform daily workplace inspections visually. Inspect weekly using inspection forms from appendix. Regularly inspecting work areas reduces hazards and maintains a clean and orderly workplace.
 - 1.1.19 All aisles, stairways, exits and access ways should be kept clear.
 - 1.1.20 Lay extension cords and hoses in such a way as to minimize tripping or obstructions to traffic.
 - 1.1.21 Clean up spills immediately to avoid hazards. In the event of clean up delay, the area must be appropriately guarded, posted or roped off.
 - 1.1.22 Sharp or pointed objects should be stored to prevent persons from coming in contact with them.
 - 1.1.23 Wastebaskets should be emptied into approved containers.
 - 1.1.24 All switches or drives on machinery should be shut down, locked out and properly tagged before cleaning, oiling or repairing.
 - 1.1.25 Electrical panels and fuse boxes should be kept closed at all times and the surrounding area kept clear.
 - 1.1.26 Working under the influence of alcohol or illegal drugs or using them at work is prohibited.
 - 1.1.27 Firearms or explosives are prohibited at work.

WORKER'S COMPENSATION PLAN FOR INJURED EMPLOYEES

The purpose of this plan is to ensure medical attention is provided in accordance with the North Carolina Industrial Commission's Workers' Compensation Act to employees who sustain compensable injuries or illnesses, which arise out of or are found to be within the course and scope of their employment. Brunswick County will encourage and assist in early return to work of employees. This policy shall be accomplished through the use of modified duty work, work hardening and other means as may be appropriate and recommended by the treating physician.

All employees of the County (probation and regular established full-time, part-time, elected official and temporary) are covered by the North Carolina Workers' Compensation Act and are entitled to medical attention and appropriate weekly indemnity for injuries or illnesses, which arise out of or are found to be within the course and scope of their employment in accordance with the North Carolina Industrial Commission.

1. Compliance

1.1 Brunswick County will work in coordination with other agencies which establishes the rules and regulations as they pertain to worker's compensation.

1.1.1 North Carolina Industrial Commission:

This agency establishes the rules and regulations under which the Workers' Compensation Act is administered. Determination of liability and all bills for payments as a result of the injury will be processed according to these rules and regulations. In cases where the County and the injured employee cannot agree on liability or compensation, the employee may file an appeal with the NC Industrial Commission.

1.1.2 North Carolina Occupational Safety & Health Administration (NC OSHA):

Workplace injuries and illnesses that may qualify under the NC Occupational Safety & Health Administration may or may not be qualified as Workers' Compensation. With the assistance of Risk Management and the reporting department, the accident status for OSHA recordkeeping will be determined.

1.1.3 Third-Party Administrator:

Brunswick County has contracted a third-party administrator to manage Workers' Compensation claims. The third-party administrator will work with County administration to determination liability, authorization of treatment, bill processing, weekly compensation benefits and forms filing. Contact Risk Management for the name and telephone number of the current third-party administrator.

2. Responsibilities

2.1 Employee Responsibility:

2.1.1 Notifying the supervisor of the accident immediately and completing an Employee Accident/Injury Report Form (located on page 16).

2.1.2 Contacting Department Head and/or Risk Management PRIOR to receiving any medical treatment (life threatening accidents occurring after normal 8-5 working hours may be directed to the nearest hospital).

- 2.1.3 Comply with the Accident Reporting Procedures and complete Employee Accident/Injury Report.
 - 2.1.4 Following the orders of the approved treating medical professional.
 - 2.1.5 Providing all medical correspondence to the Department Head or Risk Management immediately.
- 2.2 Department Head Responsibility:
- 2.2.1 Evaluating the injury and contacting Risk Management to arrange for medical treatment (life threatening accidents occurring after normal 8-5 working hours may be directed to the nearest hospital).
 - 2.2.2 Follow Accident Reporting Procedure and ensure an Employee Accident/Injury Form is forwarded to Risk Management within 24 hours from the date and time of the injury.
 - 2.2.3 Notifying Risk Management for the specifics on restricted or modified return to work duty.
 - 2.2.4 Maintaining complete confidentiality of all work-related injuries.
 - 2.2.5 Investigating the accident or unsafe act and recommending measures to eliminate or reduce the hazard.
 - 2.2.6 Assisting in controlling the cost associated with work related injuries and illnesses.
 - 2.2.7 Ensure procedural notifications are posted at all work locations and visible to all employees
- 2.3 County Administration Responsibility:
- 2.3.1 Shall ensure the injured employee receives benefits provided by the North Carolina Workers' Compensation Act if applicable.
 - 2.3.2 Shall oversee costs associated with work related injuries and illnesses.
 - 2.3.3 Shall monitor designated Workers' Compensation administrator for ensuring effective processing and monitoring of all claims.
 - 2.3.4 Communicate Workers' Compensation Policy and procedures to all employees and management and oversee Workers' Compensation program.
 - 2.3.5 Shall participate in the North Carolina Industrial Commission hearings or mediations when necessary.
 - 2.3.6 Responsible for reporting all injuries to the third party administrator via completion of Industrial Commission Form 19 requirement within three days from the date of knowledge of any injury as required the third party administrator. This is in compliance with NCIC five (5) day reporting rule.
 - 2.3.7 Shall communicate with third party administrator to pre-approve all medical treatment for injured employee.
 - 2.3.8 Analyze loss runs to determine accident trend and review training opportunities for County.



BRUNSWICK COUNTY ADMINISTRATIVE PROCEDURE ACCIDENT /INJURY REPORTING FOR EMPLOYEES

The following instructions are to be followed when an employee is injured on the job:

1. Injured employee reports incident immediately to supervisor.
2. Employee or Supervisor fills out Accident Report Form and forward to Risk Management (RM). It is the responsibility of the employee to report the incident and complete the Injury Report Form, unless the supervisor has designated additional personnel to assist.
3. If medical attention is needed, the supervisor or RM assigns Medical Authorization for Treatment Form. *(Employees must go to nearest hospital after 8pm for medical assistance).*
4. Employee goes to County approved medical facility with Medical Authorization for Treatment Form. *(The employee should never give their Health Care card or number to the doctor or hospital).*
5. If permitted by doctor, the employee returns to work. Bringing the completed Medical Authorization for Treatment Form. If follow up visits are required after the employee has been released to return to work, the employee must give any medical status reports he/she receives from the physician to the supervisor.
6. All completed forms must be forwarded to Risk Management.
7. Witness statements, if any, must be forwarded to Risk Management.
8. If the employee is not permitted to return to work, they must contact their supervisor to discuss any recommendations or treatment plans prescribed. The employee shall make sure the supervisor received the signed authorization report from the doctor or hospital requiring leave from work. All information must be forwarded to Risk Management.
9. If medical follow up or a prescription is required, and Risk Management has received proper documentation, the employee must notify their supervisor of medical instructions to follow. The participating pharmacy chains; CVS Pharmacy, Kerr Drug Store, Walgreens, and Wal-mart Pharmacy, will provide the prescription without any out of pocket expense to the employee due to a workplace accident.

Facts about Worker's Compensation Insurance

The employee is entitled to no compensation for the first seven days of disability unless the disability continues for more than twenty-one (21) days. The employee may take sick, vacation or leave-without-pay during this seven day waiting period. The seven-day waiting period includes weekend days thus requiring the employee to use only 40 hours of leave.

Should the disability continue more than twenty-one (21) days, the employee is paid at a rate of 66.6% of his/her weekly wage until the doctor releases him/her to return to work. Benefits can be paid as long as he/she is totally disabled. He/she can collect reduced benefits if released for modified duty and earning a reduced wage. ***If the employee has any questions regarding an injury or these procedures he/she should contact Risk Management at 253-2026 or 253-2078.***



EMPLOYEE ACCIDENT / INJURY REPORT FORM

FULL NAME: _____
First Middle Last

Social Security No.: _____

Address: _____
PO Box or Street
City State Zip

Date of Birth: ____/____/____

Marital Status _____ ☐ (M) ☐ (F) # of Children under 18 _____

Home Phone No. _____

Cell Phone No. _____

Work Phone No. _____

Department: _____ Date of Hire: _____

Occupation: _____ Status: _____

Full-Time, Part-Time, Seasonal, Volunteer, Etc.

Physical Location Where Injury/Incident Occurred _____

Describe Fully How Injury Occurred (Specify activity you were doing before the incident occurred and the events leading to the incident or illness. (Use back of sheet if necessary equipment, materials, chemicals, etc. you were using)

List all injuries and specify body part(s) involved (e.g. right or left) _____

Date and Hour You Returned to Work _____ : _____ am pm Full-Duty Light-Duty
☐ ☐ ☐

Dates of Restricted Work _____ to _____

Estimated Length of Restriction / Disability _____

Transfer to another Job ☐ yes ☐ no

Dates worked in transfer position _____

Name(s) of Witness(es) to Injury _____

Name and Address of Outside Employment, if applicable:

Beginning Date of Outside Employment, if applicable:

TO BE COMPLETED BY SUPERVISOR:

Is Post Accident or CDL Drug Alcohol Testing required ☐ Yes ☐ No

Was Safety Equipment Provided

☐ Yes ☐ No

Was Safety Equipment In Use At The Time

☐ Yes ☐ No

Treating Physician/Health Care Provider or Hospital (Name and Address):

Initial Treatment

- ☐ No Medical Treatment
☐ Minor: By Employer
☐ Minor Clinic/Hosp
☐ Emergency Care
☐ Hospitalized > 24 HRS

Phone #: _____

Supervisor Name (please print)

Supervisor Signature

Date

Phone #: _____ 16

E Mail: _____



BRUNSWICK COUNTY GOVERNMENT ADMINISTRATIVE PROCEDURE WORKERS' COMPENSATION LEAVE FOR INJURED EMPLOYEES

- A. An employee absent from duty because of a sickness or disability covered by the North Carolina Workers' Compensation Act may elect to use accrued sick leave or vacation for the first seven days of an injury. Workers' Compensation does not pay for leave time for the first seven days unless the employee is required by treating authority to be out for at least 21 days (after being absent for 21 days, Workers' Compensation will pay the first seven day waiting period). It will be the employees' responsibility to notify their Department Head and Human Resources of their decision for the pay period involving the seven-day waiting period. Timesheets must reflect the decision and be marked Workers' Comp on the days in which leave is taken.
- B. Additional Leave Options: On the eighth day of the authorized absence, the employee will automatically be placed on Workers' Compensation leave. The employee will receive 66 2/3% of gross wages (wages calculated from date of injury to one year prior to injury, not current gross salary) for lost time due to the injury or illness. The employee may elect to supplement Workers' Compensation payments by using compensatory sick leave or annual leave after they begin disability provided that the combination of leave supplement and Workers Compensation payments do not exceed normal compensation. If the employee elects to use compensatory time as a supplement, it shall be paid on a temporary payroll at the employee's hourly rate of pay. It will be subject to State and Federal tax withholdings and Social Security.
- C. Use of Leave for Additional Medical Treatment: Employees injured on the job and have medical appointments during regularly scheduled working hours shall not be charged sick leave or annual leave for time away from work. Paid time should be limited to reasonable time for treatment and travel. Any time in excess of this will be charged as sick leave, annual leave or leave without pay. Employees should try to schedule appointments at a time most convenient for their workplace. The employee is expected to return to work after medical treatment unless approved by authorized healthcare provider has prohibited return to work.
- D. FMLA: Qualified employees will be placed on FMLA which it will run concurrent with Workers' Compensation. See FMLA policy for additional details of qualifications.

1. Benefits While on Leave

- 1.1 The following is benefit information available to the injured employee while on approved Workers' Compensation Leave:
 - 1.1.1 Medical and dental insurance premiums will not be paid by the County. Premiums for any dependent coverage must be paid by the employee directly to the County.
 - 1.1.2 Employees eligible for longevity pay while on leave will continue to receive their annual payments.
 - 1.1.3 Any cost of living increases, bonuses, etc. in which the employee did not receive due to leave will be reinstated to the employee upon returning to work.
 - 1.1.4 The employee shall not continue to accumulate annual and sick leave for use upon returning to work.

- 1.1.5 All other payroll deductions for optional benefits (AFLAC, 401K, Life Insurance, etc.) will be the responsibility of the employee. Payments should be made by the employee directly to the County.
- 1.1.6 Employees will not be eligible for County contributions to the retirement system.
- 1.1.7 Employee is entitled to collect reimbursement from the third-party administrator for medical treatment provided they travel 20 miles or more roundtrip. It is the responsibility of the employee to notify Human Resources and request possible travel reimbursement.

2. Temporary and Part-Time Employees

- 2.1 All temporary employees and all part-time employees ineligible for benefits will be placed on inactive status and will receive only benefits which they may be eligible for under the Workers' Compensation Law. All part-time employees eligible for benefits will receive pro-rated benefits as discussed in the Benefits While on Leave section of the Workers' Compensation Policy.

3. Discipline and Consequences

- 31 Failure to Report Injury: Any employee involved in an on-the-job injury or illness who does not report it immediately will receive disciplinary action up to and including termination and may be subject to denial of benefits under the North Carolina Workers' Compensation Act.
- 32 Failure to Seek Authorized Medical Treatment: It is the County's responsibility to provide appropriate medical treatment for all work-related injuries and illnesses. Any employee injured on-the-job who does not get prior approval on medical treatment (excluding life threatening accidents and after normal business hour 8-5 accidents) will jeopardize payment of bills incurred related to the accident. In addition, failure to follow procedures as set forth in the Workers' Compensation Policy will result in disciplinary action up to and including termination.



BRUNSWICK COUNTY GOVERNMENT ADMINISTRATIVE PROCEDURE RETURN TO WORK PLAN FOR INJURED EMPLOYEES

- A. It is the practice of the Brunswick County to encourage and assist in the early return to work of employees that have been injured due to the course of their employment. This shall be accomplished through the use of modified duty, work hardening and other means as may be appropriate and recommended by the treating physician.
- B. In order for an employee to be considered for modified/light duty, a written signed authorization from a county approved medical professional must be furnished after a workplace injury has occurred. The authorization must detail specific physical duties the employee can and cannot perform along with anticipated duration of the condition. It is the responsibility of Risk Management and the Department Head to accommodate for the employee's limitations, either by minimizing the physical demands of his/her regular job or seeking another position within the County which meets the specific recommendations as specified by the authorized health care provider. The employee may not use sick leave, annual leave, or leave without pay in lieu of returning to work while on modified duty status.
- C. If the medical provider outlines restrictions on an employee's physical ability, and modified work is determined to be a viable solution by Risk Management and the Department Head. Brunswick County will make every effort to accommodate employees who require restrictions due to workplace injuries. It is at the discretion of Risk Management and the Department Head to place an injured employee in a different position for a designated time.
- D. No permanent jobs will be created to accommodate a disability from a work-related injury. Modified Duty Program assignments will be reviewed every two weeks by the Department Head or designee. Modified duty can extend up to ninety days. Extensions up to an additional ninety days will be allowed only with physician recommendation and frequent departmental reviews.
- E. In the event the County cannot provide modified duty work or lost time from work is required by the authorized medical professional, the employee will be placed on Workers' Compensation Leave as discussed in Section 7 of the Workers' Compensation Policy.
- F. Upon completion of the modified duty period as prescribed by the treating physician, medical certification must be provided to Risk Management PRIOR to returning to regular duty.

SAMPLE TEMPORARY DUTY ASSIGNMENT FORM

Employee: _____

Temporary Assignment: _____
(Department & Job)

The above-referenced employee accepts the aforementioned modified assignment on a temporary return-to- work basis. The employee understands that the modified duty assignment is temporary and that the temporary assignment in no way affects his/her employment at-will status. The employee understands that he/she has a duty to report any changes made by physician or changes in medical condition immediately to his/her supervisor.

Accordingly, the employee understands and acknowledges that this temporary assignment change the status of their at will employment, nor does it create an agreement of employment for a specified term; but rather a temporary assignment in conjunction with the modified duties as prescribed by the treating medical professional for a qualifying workplace injury.

SIGNED: _____
Employee Date

DEPARTMENT HEAD: _____

RISK MANAGEMENT: _____



BRUNSWICK COUNTY GOVERNMENT ADMINISTRATIVE PROCEDURE AUTO/PROPERTY DAMAGE REPORTING

The following instructions are to be followed when there is loss or damage to Brunswick County Property:

1. When damage to Brunswick County property occurs; the department that has experienced property loss or damage prepares an Auto/Property Loss Report (attached). *If a County vehicle is involved in an accident, call 911 and do not leave the scene of the accident until law enforcement has authorized you to do so. You must exchange pertinent information with all parties involved prior to leaving accident scene.*
2. If there is an injury involved, such as vehicle accident where medical attention is needed, a separate Accident/Injury Report must accompany the County Auto/Property Loss Report. Follow protocol outlined in Accident Reporting Procedures for Employees form. Department Head or designee must ensure medical attention is obtained and send all completed forms to Human Resources.
3. If a County vehicle is involved in an accident, the employee must complete the Auto/Property Loss Report for their immediate supervisor to provide to Risk Management. The vehicle must be taken to Brunswick County Operations Service Center along with the completed Auto/Property Loss Report for estimate of damages and inspection after the incident to ensure safe equipment operations.
4. Once determination of responsibility is made and the shop has an estimate of damages; the Service Center will authorize repairs. The Service Center will make necessary arrangements for payment to vendors performing repairs to equipment.
5. Risk Management will generate claims to capture losses and obtain any reimbursements on the County's behalf.
6. The Operations Service Center will invoice the department involved in the accident for reimbursements of repairs made. The responsible department will then authorize the Finance department to make reimbursement to Operation Services for repairs to vehicle.
7. Finance will process a journal entry to debit responsible department expenditure code and credit Operation Services expenditure code.
8. Once reimbursements have been received, Risk Management forwards check to Finance coded to general or enterprise fund with notation of claim status and department involved.
9. Finance will request the Board of Commissioners appropriate the insurance proceeds to the department where accident originated. Upon board approval, Finance will process an appropriation to add funds to the expenditure budget of the line item charged.

When a department experiences a property loss due to lightning, theft, flood or any other peril, the loss report must be completed and sent to Risk Management. Once a claim is filed, a department may be required to provide supporting documentation such as police reports, witness statements, receipts, pictures for proof of loss to provide to insurance carriers. The status of claim may depend on the information provided as to whether or not is compensable. At any time the status of a claim may be obtained from Risk Management.



BRUNSWICK COUNTY AUTO/PROPERTY LOSS REPORT

- Immediately after a property incident or loss, complete this form and send it to the Risk Manager in Administration.
- The accident vehicle must be taken to the County Garage to receive a road safety clearance inspection after the incident.

Reporting Employee _____ Phone number _____

Date, time of incident _____ Location of Incident _____

Department _____ Date of Birth _____ Date of Hire _____

County Vehicle or Equipment involved (type, year & tag # & vin #)

Officials Involved: Officer Name: _____ Report Number _____

REQUEST COPY OF EXCHANGE FORM FROM OFFICER

Description of Incident

Claimant (Property Damage)

Owner _____ Home Phone # _____

Address _____ City _____ State _____ Zip _____

Property Damage (include proof of loss receipts, photos etc.)

Claimant (Bodily Injury)

Name _____ Home Phone # _____

Address _____ City _____ State _____ Zip _____

Description of Injury

Witnesses (use reverse side if needed)

Name _____ Home Phone # _____

Address _____ City _____ State _____ Zip _____

Signature of Reporting Employee

Signature of Supervisor or Department Head

Date



BRUNSWICK COUNTY MINIMUM INSURANCE COVERAGE REQUIREMENTS

At contractor's expense, contractor shall procure and maintain the following recommended lines of insurance according to the scope of work. The County may choose to elect higher or lower coverages according to the work performed. Contractors must be insured by a licensed agent in North Carolina and rated A-VII or better by A.M. Best.

A. COMMERCIAL GENERAL LIABILITY

Covering all operations involved in this Agreement.

\$2,000,000 General Aggregate
\$2,000,000 Products/Completed Operations Aggregate
\$1,000,000 Each Occurrence
\$1,000,000 Personal and Advertising Injury Limit
\$ 5,000 Medical Expense Limit

B. WORKERS' COMPENSATION

Statutory limits covering all employees, including Employer's Liability with limits of:

\$500,000 Each Accident
\$500,000 Disease - Each Employee
\$500,000 Disease - Policy Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

\$1,000,000 Combined Single Limit – Any Auto

D. PROFESSIONAL LIABILITY

\$1,000,000 Per Occurrence

E. POLLUTION LIABILITY INSURANCE

\$1,000,000 Per Occurrence

When a contractor is required to bind pollution/environmental coverage, the contractor must provide evidence of continuation or renewal of liability insurance for a period of three (3) years following termination of the agreement.

ADDITIONAL INSURANCE AND INDEMNIFICATION REQUIREMENTS

- A. Contractor agrees to defend, indemnify, and hold harmless Brunswick County, its officers, employees, and agents 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 in connection with or arising out of this Agreement and/or the performance hereof that are due in part or in the entirety of Contractor, its employees or agents. Contractor further agrees to investigate, handle, respond to, defend and dispose of same at its sole expense and agrees to bear all other costs and expenses related thereto.

The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

BRUNSWICK COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED UNDER CONTRACTOR'S GENERAL LIABILITY INSURANCE.

- B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.
- C. Contractor shall have no right of recovery or subrogation against Brunswick County (including its officers, agents and employees), it being the intention of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the above-described insurance.
- D. Brunswick County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.
- E. All certificates of insurance must provide that the policy or policies shall not be changed or cancelled without at least thirty (30) days prior written notice.
- F. The Certificate of Insurance should note in the Description of Operations the following:
Department: _____
Contract #: _____
- G. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, hold harmless and defend Brunswick County for claims made or suits brought which result from or are in connection with the performance of this Agreement.
- H. In the event Contractor receives Notice of Cancellation of Insurance required pursuant to this Agreement, Contractor shall immediately cease performance of all services and shall provide Notice to Brunswick County's Legal/Risk Management personnel within twenty-four (24) hours.
- I. Certificate Holder shall be listed as follows;
ATTENTION: Brunswick County Risk Manager
30 Government Center Dr. NE
P.O. Box 249
Bolivia, NC 28422
- J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

SECTION II - OCCUPATIONAL SAFETY AND HEALTH COMPLIANCE

BLOODBORNE PATHOGENS

The purpose of this exposure control plan is to eliminate or minimize employee occupational exposure to blood and/or certain other body fluids and comply with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030 and its Appendix A.

1. Exposure Determination

- 1.1 OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials (OPIM). The exposure determination is made without regard to the use of personal protective equipment (i.e., employees are considered to be exposed even if they wear personal protective equipment). The exposure determination must list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency.
- 1.2 Since not all the employees in these categories would be expected to incur exposure to blood or OPIM, tasks or procedures that would cause these employees to have occupational exposure must also be listed in order to understand clearly which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:

<u>Class Code</u>	<u>Job Classification</u>	<u>Task/Procedure</u>
0106	Mosquito/Pest Control	exposure insects/spraying/mixing
6271	Excavation Drivers	excavation drivers operations
7380	Ambulance Responders	assisting patients
7520	Water & Waste Water	maintain water/waste operations
7570	Sewer Plant Operators	maintaining sewer operations
7580	Sewer Line Maintenance	maintain water/waste water ops.
7704	Firefighters/Fire Inspectors	providing first responder service
7720	Law Enforcement/Detention	providing first responder service
8831	Hospital – veterinary	providing first responder service
8832	Physician/Nurse	providing first responder service
9015	Janitors/Housekeepers	providing housekeeping to facilities
9403	Landfill/Scale Operators	landfill operations

2. Implementation Schedule and Methodology

- 2.1 OSHA requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement.

3. Compliance methods

- 3.1 Universal precautions will be observed at this workplace in order to prevent contact with blood or OPIM. All blood or OPIM will be considered infectious, regardless of the perceived status of the source individual.
- 3.2 Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after implementation of these controls, personal protective equipment shall also be utilized.
- 3.3 Controls used will be reviewed on a regular schedule and updated when necessary.
- 3.4 The process for evaluating existing controls and potential changes in engineering controls and work practices involves consultation with non-management direct-care employees
- 3.5 Hand washing facilities shall be made available to employees who incur exposure to blood or OPIM. These facilities must be readily accessible after incurring exposure. (If hand washing facilities are not feasible, the employer must provide either an antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. If these alternatives are used, the hands are to be washed with soap and running water as soon as possible.

4. Needles

- 4.1 Contaminated needles or other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken. OSHA allows an exception to this prohibition if the procedure would require that the contaminated needle be recapped or removed and no alternative is feasible, and the action is required by the medical procedure. If such action is required, the recapping or removal of the needle must be done by the use of a mechanical device or a one-handed technique.
- 4.2 Where feasible, sharps with engineered sharps injury protection (such as self-sheathing needles or needleless systems) will be used.

5. Work Area Restrictions

- 5.1 In work areas where there is reasonable likelihood of exposure to blood or OPIM, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops where there is blood or OPIM. Mouth pipetting/suctioning of blood or OPIM is prohibited.
- 5.2 All procedures will be conducted in a manner that will minimize splashing, spraying, splattering, and generation of droplets of blood or OPIM.

6. Specimens

- 6.1 Specimens of blood or OPIM will be placed in a container that prevents leakage during the collection, handling, processing, storage, and transport of the specimens. The container used for this purpose will be labeled or color-coded in accordance with requirements of the OSHA standard. (NOTE: The standard provides an exemption for specimens from the labeling/color coding requirement, provided that the facility uses universal precautions in the handling of all specimens and the containers are recognizable as containing specimens. This exemption applies only while the specimens remain in the facility. If the employer chooses to use this exemption, it should be stated here.)

- 6.2 Any specimens that could puncture a primary container will be placed within a secondary container that is puncture resistant.
- 6.3 If outside contamination of the primary container occurs, the primary container will be placed within a secondary container that prevents leakage during handling, processing, storage, transport, or shipping of the specimen.

7. Contaminated Equipment

- 7.1 Supervisors and employees are responsible for ensuring that equipment which has become contaminated

with blood or OPIM shall be examined prior to servicing and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

8. Personal Protective Equipment (PPE)

8.1 PPE Provision

- 8.1.1 Department Directors and supervisors are responsible for ensuring that the following provisions are met.
- 8.1.2 All PPE used at this facility will be provided without cost to the employee. PPE will be chosen based on the anticipated exposure to blood or OPIM. The PPE will be considered appropriate only if it does not permit blood or OPIM to pass through or reach the employee's clothing, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the duration of time while the protective equipment will be used.

8.2 PPE Use

- 8.2.1 Supervisors shall provide the employee with appropriate PPE along with proper training on its usage. Unless the employee has signed a letter of declination, they are required to use the PPE during in order to prevent health hazards. It is the employee's professional judgment that in the specific instance the use of PPE would have prevented the delivery of health care or posed an increased hazard to the safety of the employee or co-worker. When an employee makes this judgment, the circumstances shall be investigated and documented to determine whether changes should be instituted to prevent such occurrences in the future.

8.3 PPE Accessibility

- 8.3.1 Supervisors shall ensure that appropriate PPE in various sizes is readily accessible at the work site or is issued (without cost) to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to employees who have a documented sensitivity to the gloves normally provided.

8.4 PPE Cleaning, Laundering and Disposal

- 8.4.1 All PPE will be cleaned, laundered, and/or disposed of by the employer at no cost to employees. All repairs and replacements will be made by the employer at no cost to employees.
- 8.4.2 All garments that are penetrated by blood or OPIM shall be removed immediately, or as soon as possible. All PPE shall be removed before leaving the work area. When PPE is removed, it shall be placed in an appropriately designate area or container for storage, laundering, decontamination or disposal.

8.5 Gloves

- 8.5.1 Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, OPIM, non-intact skin, and mucous membranes; when performing medical procedures; and when handling or touching contaminated items or surfaces.
- 8.5.2 Disposable gloves used at this facility are not to be washed or decontaminated for re-use. They will be replaced as soon as they become contaminated, torn, punctured, or their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use, provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or show other signs of deterioration or when their ability to function as a barrier is compromised.

8.6 Eye and Face Protection

- 8.6.1 Masks, in combination with eye protection devices such as goggles or glasses with solid side shields, or chin length side face shields must be worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

8.7 Additional Protection

- 8.7.1 Additional protective clothing (such as lab coats, smocks, gowns, aprons, clinic jackets, or similar outer garments) shall be worn when gross contamination can reasonably be anticipated. They will be replaced when their ability to function as a barrier is compromised.

9. Housekeeping

- 9.1 Operation Services, Housekeeping unit will maintain all facilities unless contracted services are in place. The Housekeeping unit will provide each facility with a scheduled housekeeper and procedures on proper maintenance.
- 9.2 All contaminated work surfaces will be decontaminated after completion of procedures, and immediately or as soon as feasible after any spill of blood or OPIM, as well as at the end of the work shift if the surface may have become contaminated since the last cleaning.
- 9.3 All bins, pails, cans, and similar receptacles shall be inspected and decontaminated on a regularly scheduled basis. Any broken glassware that may be contaminated will not be picked up directly with the hands.

10. Regulated Waste

10.1 Disposable Sharps

- 10.1.1 Disposable sharps shall be discarded immediately (or as soon as feasible) in containers that are closable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded. This applies to all contaminated sharps, regardless of whether they are designed with sharps injury prevention features.
- 10.1.2 During use, containers for contaminated sharps shall be easily accessible to personnel and located as close as feasible to the immediate area where sharps are used or can reasonably be anticipated to be found (e.g., laundries). The containers shall be kept upright throughout use and replaced routinely, and not be allowed to overfill.
- 10.1.3 When moving containers of contaminated sharps from the area of use, the containers shall be closed prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

10.1.4 The container shall be placed in a secondary container if leakage of the primary container is possible. The second container shall be closeable, constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping. The second container shall be labeled or color-coded to identify its contents.

10.2 Other Regulated Waste

10.2.1 Other regulated waste shall be placed in containers that are closeable and constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping. The waste container must be labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

NOTE: Disposal of all regulated waste shall be in accordance with all applicable federal, state and local regulations.

11. Laundry Procedures

11.1 Laundry contaminated with blood or OPIM will be handled as little as possible. Such laundry shall be placed in appropriately marked bags (biohazard labeled or color-coded red) at the location where it was used. The laundry shall not be sorted or rinsed in the area of use.

NOTE: If your facility ships contaminated laundry offsite to a facility for laundering by a contracted service provider; the department head will be responsible to include a requirement in the contracts "scope of work" that the service provider will utilize the equivalent of Universal Precautions.

12. Hepatitis B Vaccine and Post-Exposure Evaluation and Follow-up

12.1 General

12.1.1 Brunswick County shall make available the Hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure follow-up to employees who have had an exposure incident. This may include source testing where applicable.

12.1.2 Brunswick County Health and Human Services shall ensure that all medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post-exposure follow-up including prophylaxis are:

- a) Made available at no cost to the employee;
- b) Made available at a reasonable time and place;
- c) Performed by, or under the supervision of, a licensed physician or other licensed healthcare professional; and
- d) Provided according to the recommendations of the US Public Health Service.

12.1.3 For post-exposure follow-up, the HCP's written opinion shall be limited to the following:

- a) A statement that the employee has been informed of the results of the evaluation; and
- b) A statement that the employee has been told about any medical conditions resulting from exposure to blood or OPIM which may require further evaluation or treatment.

NOTE: All other findings or diagnosis shall remain confidential and shall not be included in the Medical report.

12.2 Hepatitis B Vaccination

12.2.1 Brunswick County Health and Human Services monitors the Hepatitis B vaccination and ensures program safety.

- 12.2.2 Hepatitis B (HB) vaccination will be made available after the employee has received the training in occupational exposure (see “Information and Training” section), and within 10 working days of initial assignment to all employees who have occupational exposure unless: the employee has previously received the complete HB vaccination series; antibody testing has revealed that the employee is immune; or the vaccine is contraindicated for medical reasons.
- 12.2.3 Participation in a pre-screening program shall not be a prerequisite for receiving HB vaccination.
- 12.2.4 For employees who complete the HB vaccination series, antibody testing will be made available at no cost to the employee, one to two months after completion of the series, as recommended by the US Public Health Service.
- 12.2.5 Employees who decline the HB vaccination shall sign the OSHA-required declination form indicating their refusal. Any employee who initially declines HB vaccination, but later decides to accept vaccination while still covered by the standard, shall be provided the vaccination series as described above.
- 12.2.6 If, at a future date, the US Public Health Service recommends a routine booster dose of HB vaccine, such booster doses shall be made available.

13. Labels and Signs

- 13.1 Each Department/Division will select a person to ensure that biohazard labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or OPIM, and other containers used to store, transport or ship blood or OPIM. The universal biohazard symbol shall be used. Labels shall be fluorescent orange or orange-red and shall be affixed as close as feasible to the container by string, wire, adhesive, or other method which prevents loss or unintentional removal. Red bags or containers may be substituted for labels.
- 13.2 Labels for contaminated equipment shall comply with the previous paragraph and shall state which portions of the equipment are contaminated.
- 13.3 The following are exempted from the labeling requirement:
 - 13.3.1 Containers of blood products that have been released for transfusion or other clinical use;
 - 13.3.2 Containers of blood or OPIM that are placed in a labeled container for storage, transport, shipment or disposal; and
 - 13.3.3 Regulated waste that has been decontaminated.

14. Information and Training

- 14.1 Each department will provide the name of position/person responsible for training provided at the time of initial assignment to tasks where occupational exposure may occur, and that training is repeated within 12 months of the previous training. Training shall be tailored to the education and language level of the employee and offered during the normal work shift. Training will be interactive, and will cover the following:
 - 14.1.1 A copy of the standard and an explanation of its contents;
 - 14.1.2 A discussion of the epidemiology and symptoms of bloodborne diseases;
 - 14.1.3 An explanation of the modes of transmission of bloodborne pathogens;
 - 14.1.4 An explanation of the organization’s bloodborne pathogens Exposure Control Plan (this program), and the method for obtaining a copy;

- 14.1.5 The recognition of tasks that may involve exposure;
 - 14.1.6 An explanation of the use and limitations of methods to reduce exposure, such as engineering controls, work practices, and personal protective equipment (PPE);
 - 14.1.7 Information on the types, use, location, removal, handling, decontamination, and disposal of PPE;
 - 14.1.8 An explanation of the basis of selection of PPE;
 - 14.1.9 Information on the Hepatitis B vaccination, including efficacy, safety, method of administration, benefits, and that it will be offered free of charge;
 - 14.1.10 Information on the appropriate actions to take and persons to contact in case of an emergency involving blood or OPIM;
 - 14.1.11 An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up;
 - 14.1.12 Information on the evaluation and follow-up required after an employee exposure incident, particularly incidents which involve needlesticks or contaminated sharps; and
 - 14.1.13 An explanation of the signs, labels, and color-coding system used to identify biohazards, regulated waste, and other potential BBP hazards.
- 14.2 The person conducting the training shall be knowledgeable in the subject matter.
- 14.3 Employees who have received training on bloodborne pathogens in the 12 months preceding the effective date of this policy shall receive training only in provisions of the policy that were not covered in their previous training. Additional training shall be provided to employees when there are changes in tasks or procedures that affect occupational exposure.

15. Recordkeeping - Medical Records

- 15.1 Brunswick County is responsible for maintaining medical records as indicated below. (NOTE: If you contract for post-exposure follow-up and Hepatitis B vaccination evaluation, make sure the contract language includes provisions for recordkeeping that are consistent with the requirements of 29 CFR 1910.1020.)
- 15.2 Medical records shall be maintained in accordance with OSHA standard 29 CFR 1910.1020. These records shall be kept confidential and must be maintained for the duration of employment plus 30 years. The records shall include the following:
- 15.2.1 The employee's name and social security number;
 - 15.2.2 A copy of the employee's HBV vaccination status, including the dates of vaccination OR a signed declination form;
 - 15.2.3 A copy of all results of examinations, medical testing (including post-vaccination antibody testing), and follow-up procedures; and

- 15.2.4 A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, documentation of the route(s) of exposure, and circumstances of the exposure.

16. Training Records

- 16.1 Each department is responsible for maintaining training records. Training records shall be maintained for 3 years from the date of training, and shall document the following information:
 - 16.1.1 The dates of the training sessions;
 - 16.1.2 An outline describing the material presented;
 - 16.1.3 The names and qualifications of persons conducting the training; and
 - 16.1.4 The names and job titles of all persons attending the training sessions.

17. Sharps Injury Log

- 17.1 For cases that involve puncture injury from contaminated sharps, Risk Management is responsible for maintaining a sharps injury log. Information shall be entered on the log so as to protect the confidentiality of the injured employee. At a minimum, log entries shall document the following:
 - 17.1.1 The type and brand of device involved in the incident;
 - 17.1.2 The department or work area where the incident occurred; and
 - 17.1.3 An explanation of how the incident occurred.

NOTE: The sharp injury log is required in addition to the OSHA 300 log.

- 17.2 Availability
 - 17.2.1 All employee records shall be made available to the employee in accordance with 29 CFR 1910.1020.
 - 17.2.2 All employee records shall be made available to the Assistant Secretary of Labor for Occupational Safety and Health (OSHA) and the director of the National Institute for Occupational Safety and Health (NIOSH), or their representatives, upon request.
- 17.3 Transfer of Records
 - 17.3.1 If this facility is closed and/or there is no successor employer to receive and retain the records for the prescribed period, the Director of NIOSH shall be contacted for final disposition.

18. Evaluation and Review

- 18.1 Risk Management is responsible for annually reviewing this program and its effectiveness, and for updating this program as needed. This review shall include and document:
 - 18.1.1 Consideration and implementation, where feasible, of commercially available safer medical devices designed to eliminate or minimize occupational exposure; and

- 18.1.2 Input from non-management direct care staff who are potentially exposed to injury from contaminated sharps on identification, evaluation and selection of engineering and work practice controls.

19. Outside Contractors

- 19.1 While the written exposure plan does not have to address information obtained from and/or provided to outside contractors, a standard operating procedure may be provided by the contractor and append them to this document.

Hepatitis B Vaccine Declination

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 vaccine series at no charge to me.

Employee's name (print)

Employee's signature

Administrator signature

Date

COMMERCIAL DRIVER'S LICENSE DRUG ALCOHOL TESTING
BRUNSWICK COUNTY ADMINISTRATIVE PROCEDURES

1. General

- 1.1 Employees who are required to hold a Commercial Driver's License (CDL) based on duties performed are subject to random drug and alcohol testing as prescribed by the Federal Motor Carrier Safety Act. A CDL is required for:
 - 1.1.1 Vehicles with a gross weight rating of 26,001 or more pounds
 - 1.1.2 Vehicles designed to transport 16 or more passengers, including the driver
 - 1.1.3 Vehicles used to transport hazardous materials and are required to be placarded in accordance with the Hazardous Materials Transportation Administration
- 1.2 All testing is conducted by a certified testing facility that complies with the federal regulations pertaining to the Federal Motor Carrier Safety Act.

2. Post-Employment Offer

- 2.1 After an offer (contingent on receiving a negative result from drug test) is made, **but before a candidate begins employment** in a position requiring a CDL, a drug test must be conducted and results received. The County does not conduct pre-employment alcohol testing. Human Resources coordinates the testing; however, the hiring department is responsible for test costs.
- 2.2 Human Resources verifies with the final candidate whether he/she has had a positive test results or a refusal to test within the last 3 years. Applicants who test positive are removed from consideration for employment and are provided information on how to receive an evaluation for assistance from a substance abuse professional (SAP). The applicant is responsible for any costs associated with evaluation and treatment services.
- 2.3 The final candidate must meet with a Human Resources representative to verify the past 3 years of employment in which a CDL license was required and to have the candidate sign a Release of Information Form. This form gives permission to the County to perform necessary background checks and license checks for the past three (3) years. If the candidate does not grant permission for the release of this background information, he or she is not eligible for employment. The candidate must also give permission through the Federal Motor Carrier Safety Administration's Drug and Alcohol Clearinghouse for Brunswick County to run a query to view any prior positive tests.

3. Post Hire

- 3.1 The final candidate may begin employment with the County before Human Resources receives the drug and alcohol testing and background information from previous employers. Human Resources completes the drug and alcohol background check as soon as possible but not longer than 30 days from the new employee first performing safety-sensitive duties.
- 3.2 If a previous employer reports a drug or alcohol violation, the employee will face disciplinary action, up to and including dismissal, if he or she had not provided this information to Human Resources during the pre-employment verification process.

4. Random Testing

- 4.1 CDL-licensed employees are subject to random testing on a regular basis to comply with federal regulations. Human Resources notifies the hiring department of the need for testing. The employee must report to the collection or testing site immediately upon notification. If the selected employee is not at work, the department will notify Risk Management and one of the alternate employees will be tested.

5. Reasonable Suspicion Testing

- 5.1 If a supervisor who has received required training under Department of Transportation (DOT) rules observes behavior or other signs of possible alcohol or controlled substance abuse immediately before, during, or immediately after performing safety-sensitive duties, the employee is directed to undergo testing. The person observing the behavior must notify Human Resources of the need for testing and complete the Reasonable Suspicion Drug and Alcohol Testing form. (See Appendix)
- 5.2 The employee is provided with transport to and from the collection or testing facility and arrangements will be made for transporting them home. Tests should be performed immediately and must be conducted within 8 hours for reasonable suspicion of alcohol abuse and within 32 hours for reasonable suspicion of controlled substance abuse. The employee must not engage in safety-sensitive duties until negative test results are received.

6. Post-Accident Testing

- 6.1 The employee carrying a CDL must be tested for alcohol and controlled substances after an accident involving:
- 6.1.1** A fatality **or**
 - 6.1.2** An employee is cited for a traffic violation where their actions contributed to bodily injury which requires immediate medical treatment on or away from the scene **or**
 - 6.1.3** A vehicle tow is required.
- 6.2 Tests should be performed immediately following the accident; however, the alcohol test must be conducted within 8 hours and the controlled substance test must be administered within 32 hours.

7. Positive Test Results/Return to Duty

- 7.1 If positive drug test results or alcohol tests of 0.04 BAC or greater are received, the employee must immediately be removed from safety-sensitive duties. Human Resources reports any positive drug and alcohol test results, other than pre-employment, to the Division of Motor Vehicles (DMV) within 5 business days following the receipt of confirmation of a positive drug test.
- 7.2 In addition, the employee is subject to disciplinary action, up to and including dismissal, under Brunswick County Personnel Policy #560. The employee is also provided with information to obtain a substance abuse evaluation by a substance abuse professional (SAP).
- 7.3 If allowed to return to work, the employee must complete the evaluation and any recommended treatment, and produce a negative test result prior to return. The employee is subject to a minimum of 6 follow up tests during the 12 months after return to duty. The County is not required to pay for rehabilitation or to hold a job for an employee.

- 7.4 If positive alcohol tests of 0.02 to 0.039 are received, the employee must be removed from safety-sensitive duties for 24 hours and then be evaluated by his or her supervisor for approval to return to duty. The employee is subject to disciplinary action, up to and including dismissal, under Brunswick County Personnel Policy #560.

8. Refusal To Be Tested

- 8.1 All of the following are considered a refusal to be tested:
- 8.1.1 Failure to appear for testing
 - 8.1.2 Not appearing for testing in a timely manner as determined by the employer
 - 8.1.3 Leaving the collection site before testing is completed
 - 8.1.4 Failure to provide a specimen
 - 8.1.5 Failure to allow direct observation for reasonable suspicion
 - 8.1.6 Providing an insufficient specimen without a valid medical reason
 - 8.1.7 Failure to undergo medical examination when directed
 - 8.1.8 Failure to cooperate with the testing process
 - 8.1.9 Providing an adulterated or substituted specimen
- 8.2 Employees who refuse to be tested are subject to disciplinary action, up to and including dismissal, and will be referred for evaluation by a substance abuse professional (SAP) where depending on the circumstances may not be the financial responsibility of the County.

9. Diluted Specimens

- 9.1 Verified positive diluted specimens are treated as positive test results. The County will require employees with negative dilute specimens to undergo immediate unobserved recollection.

10. Split Specimen Testing

- 10.1 The collection or testing facility must perform a split specimen collection. If an applicant or employee tests positively for drugs, he or she can request a re-test using the split specimen. The applicant or employee will bear the cost of the re-test. If already employed, the individual will be placed on leave pending the results of the split test. Depending on the circumstances, may not be the financial responsibility of the County.

11. Training

- 11.1 Employees are provided information on testing policy and procedures including alcohol and controlled substance awareness information. Supervisors must receive initial training on the policy and procedures, including information on alcohol misuse and indicators of the use of controlled substances (reasonable suspicion). Additional training is required if there are changes to federal regulations.

12. Recordkeeping

- 12.1 Human Resources maintains pre-employment background checks for 3 years. Information released to other employers concerning current or previous employees is maintained for 5 years. Non- negative drug test results, alcohol tests of 0.04 BAC or greater, refusals to test, and SAP referral information is maintained for 5 years. Negative drug and alcohol tests are retained for one year.

13. Required Testing:

- 13.1 Pre-employment - conducted before applicants are hired or after an offer to hire, but before actual performing safety-sensitive functions for the first time. This testing now excludes alcohol testing.
- 13.2 Post-accident - conducted after accident for drivers whose performance could have contributed to the accident (as determined by a citation for a moving traffic violation) and for all fatal accidents even if the driver is not cited for a moving traffic violation.
- 13.3 Reasonable suspicion - conducted when a trained supervisor or official observes behavior or appearance that is characteristic of alcohol or drug misuse.
- 13.4 Random - conducted on a random unannounced basis just before, during or just after performance of safety-sensitive functions. Fifty percent of all covered employees are to be drug tested each year, and 25 percent of all covered employees are to be alcohol tested each year.
- 13.5 Return-to-Duty and Six Follow-up Tests conducted when an individual who has violated the prohibited alcohol or drug conduct standards returns to performing safety-sensitive duties. Follow- up tests are unannounced and at least six tests must be conducted in the first 12 months after a driver returns to duty.
- 13.6 On-site collection of samples and coordination with nearby clinics.
- 13.7 Access to counseling
- 13.8 Required state and federal reports
- 13.9 Consultation and support to members.

Brunswick County Confined Space Entry Procedure

The purpose of this procedure is to protect employees from the hazards associated with entry into confined spaces, permit and non-permit, and to develop procedures by which employees will enter such spaces in accordance with 29 CFR 1910.146.

1. Procedure

- 1.1 All confined spaces owned or operated by Brunswick County that meet the definition of permit-required confined spaces (PRCS) will be identified and appropriately marked to read Confined Space - Enter by Permit Only. Brunswick County must control access to these spaces. Where applicable, Alternate Entry Procedures will be applied to confined spaces owned and operated by Brunswick County.
- 1.2 Employees are prohibited from entering any space meeting the definition of a PRCS unless the following conditions are met:
 - 1.2.1 Brunswick County determines that employees must enter PRCS to perform assigned duties.
 - 1.2.2 Employees entering PRCS are trained to safely perform these duties in a manner consistent with Brunswick County policies and procedures.
 - 1.2.3 The PRCS is rendered safe for entry by the following:
- 1.3 By elimination of all actual and potential hazards that may be present and which might otherwise develop during the entry due to the work to be performed inside. The space may then be reclassified as a non-permit space after the elimination of all actual and potential hazards. The step-by-step process of achieving hazard elimination shall be documented prior to this reclassification and worker entry.
- 1.4 By elimination of all actual and potential hazards except for hazardous atmospheres. Using continuous positive forced air ventilation drawn from a known clean source, all the actual and potential hazard atmospheric conditions have to be eliminated prior to and during all entries and work to be performed inside. Prior to entry, Brunswick County employees must be able to verify that these hazardous atmospheric conditions have been successfully eliminated by taking measurements from outside of the PRCS, and without breaking the plane of the entry point. Such atmospheric readings shall be taken at intervals not to exceed every vertical 4 feet and properly documented on the Brunswick County Confined Space Alternate Procedure Entry Form prior to any employee entering the space.
- 1.5 Permits issued under the written procedure will be limited to the duration of the job but no longer than one work shift. A new permit is required if work continues on a following shift or another day.

2. Definitions

- 2.1 Confined Space - a space that meets all three of the following conditions:
 - 2.1.1 Is large enough and so configured that an employee can bodily enter and perform assigned work.
 - 2.1.2 Has limited or restricted means for entry or exit (for example, wet wells, water tanks, storage tanks, and meter vaults are spaces that have limited mean of entry).
 - 2.1.3 Is not designed for continuous human occupancy.

- 2.2 Permit-Required Confined Space (Permit Space) - a confined space that has one or more of the following characteristics:
- 2.2.1 Contains or has the potential to contain a hazardous atmosphere.
 - 2.2.2 Contains a material that has the potential for engulfing an entrant.
 - 2.2.3 Has an internal configuration such that the entrant could be trapped or asphyxiated by inwardly converging walls or a floor the slopes downward and tapers to a smaller cross section.
 - 2.2.4 Contains any other recognized serious safety and/or health hazard.

3. Duties and Responsibilities

- 3.1 Authorized Attendant - The trained individual stationed outside the permit space to monitor the authorized entrants and to perform all attendant duties. The attendant will:
- 3.1.1 Remain outside the permit space during entry operations unless relieved by another authorized attendant.
 - 3.1.2 Perform non-entry rescues when specified by the County's rescue procedure initiated by Brunswick County Emergency Services.
 - 3.1.3 Identify and monitor existing and potential hazards including information on the mode of exposure signs or symptoms, consequences, and physiological effects.
 - 3.1.4 Must maintain direct communication with, and keep an accurate account of, workers entering the permit space.
 - 3.1.5 Order evacuation of the permit space when a prohibited condition exists; when a worker shows signs of physiological effects of hazard exposure; when an emergency outside the confined space exists; or when the attendant cannot effectively and safely perform required duties.
 - 3.1.6 Summon rescue and other support services during an emergency by dialing 911.
 - 3.1.7 Ensure that unauthorized people stay away from permit spaces or exit immediately if they have entered the permit space.
 - 3.1.8 Inform authorized entrants and the entry supervisor if any unauthorized person enters the permit space.
 - 3.1.9 Perform no other duties that interfere with the attendant's primary duties must maintain in direct contact with workers in confined space.

NOTE: The following positions have been trained and are Authorized Attendants:
Collections Mechanic, Distribution Mechanic, Plant Mechanic, Water Distribution Foreman, Collections Foreman, Utilities Foreman, Waste water Treatment Plant Operator

- 3.2 Authorized Entrant - The trained individual who enters the permit space. The entrant is required to:
- 3.2.1 Know space hazards, including information on the means of exposure such as inhalation or dermal absorption, signs and symptoms, and consequences of the exposure.
 - 3.2.2 Properly inspect and use all appropriate personal protective equipment.
 - 3.2.3 Must use correct gas detection monitor and review results to confirm that acceptable entry conditions exist prior to entry.
 - 3.2.4 Maintain communication with attendants as necessary to enable them to monitor the entrant's status and alert the entrant to evacuate when necessary.
 - 3.2.5 Exit from the permit space as soon as possible: 1). when ordered by the attendant; 2). when he or she recognizes the warning signs or symptoms of exposure; 3). when a prohibited condition exists; and/or 4). when an automatic alarm is activated.
 - 3.2.6 Alert the attendant when a prohibited condition exists or when warning signs or symptoms of exposure may be evident.

NOTE: The following positions have been trained and are Authorized Entrants:
Collections Mechanic, Distribution Mechanic, Plant Mechanic, Waste Water Treatment Operator, Cross-Connections Operator, Control Operator, Utility Systems Electrician, Utility Locator

- 3.3 Entry Supervisor - The trained individual with the responsibility to ensure that acceptable entry conditions are present within a permit space under his or her jurisdiction; issuing a permit authorizing entry; overseeing entry operations; and terminating the entry and permit.

3.3.1 For each entry into a PRCS, the designated entry supervisor will:

- a) Notify Brunswick County 911 Center of Entry Location and Time.
- b) Perform the pre-entry duties of the entry supervisor on the permit space to be entered.
- c) Prepare an alternate procedure entry permit for entrance of space to be entered or prepare the documentation for reclassification to a non-permit space or suspend the entry process and contact department head or designee to assist in determining how to proceed.
- d) Perform the post-entry duties of the entry supervisor.
- e) Collect the permit from the attendant at the end of entry or prepare the documentation for reclassification or alternate entry.

3.3.2 For the duration of each entry into a permit space, the entrants and attendants will perform the duties outlined in these procedures and will return the permit or documentation to department head or designee upon termination of entry.

NOTE: The following lead positions have been trained and are Authorized Entry Supervisors: *Water Distribution Foreman, Collections Foreman, Utilities Foreman, Chief Plant Operator*

- 3.4 Contractors - When initiating a contract, the County department will appoint a designee to ensure that every contractor who will work within an identified permit space or work within a non-permit space will:

3.4.1 Notify the contractor what spaces are permit-required confined spaces and of the potential hazards within those spaces and any on-going entry operations.

3.4.2 Require the contractor to control entry into the space meeting the requirements of 29 CFR 1910.146 by submitting a copy of their confined space program and agreed upon rescue operation.

3.4.3 Brunswick County requires the contractor to eliminate any temporary hazards created by the work. If any permanent hazards are created by the work the contractor must notify Brunswick County contact person.

- 3.5 Rescue Service Operation - Brunswick County will contact emergency personnel by dialing 911 prior to a scheduled entry to organize County efforts. Brunswick County uses Brunswick County Emergency Management to provide rescue operations during non-scheduled emergency operations as well. Brunswick County Emergency Management has designated confined space response personnel, all appropriate rescue equipment, including respirators, and proper training.

NOTE: Brunswick County Rescue service personnel must receive the authorized entrants training and be trained to perform assigned rescue duties. The following personnel have been trained as rescue service personnel:
Brunswick County Emergency Management Department - Confined Space Rescue Division

3.5.1 The standard also requires that all rescuers be trained in first aid and CPR. At a minimum, one rescue team member must be currently certified in first aid and CPR. Employers must ensure that practice rescue exercises are performed yearly and that

rescue services are provided access to permit spaces so they can practice rescue operations. Rescuers also must be informed of the hazards of the permit space. This includes off-site rescue teams such as local fire and rescue companies.

- 3.5.2 In addition, Brunswick County uses Brunswick County Emergency Services as off-site rescue services. Brunswick County will notify the off-site rescue of the permit-required confined space entry and ensure that the rescue service is on standby during entry by dialing 911.

3.6 Harnesses and Retrieval Lines

- 3.6.1 Authorized entrants who enter a permit space must wear a chest or full body harness with a retrieval line attached to the center of their backs near shoulder level or above their heads. Wristlets may be used if Brunswick County can demonstrate that the use of a chest or full body harness is not feasible or creates a greater hazard.
- 3.6.2 The other end of the retrieval line must be attached to a mechanical device or a fixed point outside the permit space. A mechanical device must be available to retrieve someone from vertical type permit spaces more than 5 feet (1.52m) deep.

3.7 Safety Data Sheets

- 3.7.1 If an injured entrant is exposed to a substance for which a safety data sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or other written information must be made available to the medical facility personnel treating the exposed entrant.

3.8 Training

- 3.8.1 The respective supervisor will ensure that each employee receives awareness training on:
 - a) The characteristics of a confined space.
 - b) The characteristics of a permit-required confined space.
 - c) Whether they are allowed to enter permit-required confined spaces.
 - d) Required actions when working around or near a permit space entry.
 - e) The authority of authorized attendants and entry supervisors.
- 3.8.2 Training will be required:
 - a) During orientation.
 - b) Prior to entry into a permit-required confined space.
 - c) Whenever the supervisor becomes aware that the employee has failed to follow the instructions provided in the training.
- 3.8.3 The supervisor will provide verification of training to:
 - a) department head or designee

3.9 Entry Supervisors, Attendants and Entrants Training

- 3.9.1 The department head or designee will ensure that employees performing duties designated as entry supervisors, attendants and entrants receive training in:
 - a) The requirements of this written procedure.
 - b) The duties, authority and responsibilities of entry supervisors, attendants, lead entrants and entrants.
 - c) The types of hazards expected to be encountered in permit spaces.
 - d) The calibration, use, care and cleaning of equipment expected to be used during entry operations
 - e) The performance of pre-entry actions expected to be required in permit spaces.

3.9.2 Training will be provided:

- a) Prior to assignment or authorization of duties within permit spaces.
- b) Within one month of revisions to this written procedure. Assignment or authorization for permit space entry will be suspended until training is completed.
- c) Whenever there is a change in permit space operations that presents a hazard an employee has not been previously trained on.
- d) Whenever the supervisor becomes aware that an employee is deviating from this written procedure. Assignment or authorization for permit space entry will be suspended until training is completed.
- e) Annually.

3.9.3 Brunswick County will certify that each affected employee has successfully completed training. The certification must include at least the following:

- a) Employee name
- b) Name, signature or initials of the trainer
- c) Dates of training

3.9.4 Additionally, the certification may include a synopsis of the topics covered, copies of materials used during training such as handouts and presentations, and copies of tests (if used) to determine trainee understanding and proficiency, and other documentation deemed appropriate by Brunswick County. The certification must be maintained by Brunswick County and a copy may be provided to the employees and their authorized representatives.

3.10 Retention of Records

3.10.1 Canceled permits and other documentation will be retained by Brunswick County in the department of origin for one year following the date of entry. Permits will then be retained as an employee exposure record, if applicable.

3.11 Written Program Review

3.11.1 Brunswick County will review the effectiveness of the program annually, using the canceled permits and other documentation from the preceding 12 months, entry supervisors' comments, and other available information. If no entries were made during the preceding 12 months, no annual review is required. The entry supervisors, authorized attendants or entrant may make recommendations to management at any time to make changes in procedures to address and correct confirmed weaknesses in the procedures.

Brunswick County Confined Space Entry Permit

We have reviewed the work authorized by this permit and the information contained herein. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

Permit Prepared By: (Supervisor) _____

Approved By: (Unit Supervisor) _____

Reviewed By: (Operations Personnel) _____
(printed name) (signature)

Date and Time Issued: _____ Date and Time Expires: _____

Job site/Space I.D.: _____ Job Supervisor: _____

Equipment to be worked on: _____ Work to be performed: _____

Entrants Name(s) _____

Authorized Attendant: _____

1. Atmospheric Checks: Time _____
Oxygen _____ %
Explosive _____ % L.F.L.
Toxic _____ PPM

2. Tester's signature: _____

3	Source isolation (No Entry):	N/A	Yes	No	4. Ventilation Modification:	N/A	Yes	No
	Pumps or lines blinded,				Mechanical	()	()	()
	disconnected or blocked	()	()	()	Natural Ventilation only	()	()	()

5. Atmospheric check after isolation and ventilation:
Oxygen _____ % >19.5% <23.5%
Explosive _____ % L.F.L. <10%
Toxic _____ PPM <10 PPM H(2)S
Time _____
Tester's signature: _____

6. Communication procedures: _____

7. Rescue procedures: _____

8.	Entry, standby and back up persons:	Yes	No
	Successfully completed required training?-----	()	()
	Is it current?-----	()	()

9.	Equipment:	N/A	Yes	No
	Direct reading gas monitor—tested -----	()	()	()
	Safety harnesses and lifelines for entry and standby persons-----	()	()	()
	Hoisting equipment-----	()	()	()
	Powered communications-----	()	()	()
	SABA or SCBA for entry and standby persons -----	()	()	()
	Protective Clothing-----	()	()	()
	All electric equipment listed Class I, Division I, Group D and non-sparking tools-----	()	()	()

10. Periodic atmospheric tests:

Oxygen _____ %	Time _____	Oxygen _____ %	Time _____
Oxygen _____ %	Time _____	Oxygen _____ %	Time _____
CO _____ %	Time _____	CO _____ %	Time _____
CO _____ %	Time _____	CO _____ %	Time _____
Methane _____ %	Time _____	Methane _____ %	Time _____
Methane _____ %	Time _____	Methane _____ %	Time _____
Toxic _____ %	Time _____	Toxic _____ %	Time _____
Toxic _____ %	Time _____	Toxic _____ %	Time _____

11. Permit Cancellation:

Date: _____ Time: _____ Reason: _____ Signature: _____

Canceled permits and other documentation will be retained by Brunswick County Utilities for one year following the date of entry. Permits will then be retained as an employee exposure record, if applicable

☐ Work Completed

☐ Other (Explain) _____

Brunswick County Alternate Entry Permit

Applicability. This form applies to the entry of a permit-required confined space (PRCS) in which ***the only hazard is atmospheric*** and this hazard can be controlled and the space maintained safe for entry with continuous forced air ventilation (per 29 CFR 1910.146, c, 5). If conditions do not meet these requirements, you must follow Confined Space Entry Procedures

Instructions. This form must be completed before anyone enters the space and kept at or near the entrance to the space during the entry. Forms will be retained for a minimum of one year. To ensure entry conditions are acceptable, this form is good for one day only. For work lasting more than one day, a separate form is needed for each day's work.

Alternate Entry Confined Space

Reason for entry:	Entry date:
Location:	
Space description:	
List all known atmospheric hazards associated with the confined space:	
List all potential atmospheric hazards that will be introduced by the planned work:	
Forced air ventilation required? ☐ Yes ☐ No	

Confirmation (must be signed by the confined space entry supervisor before work begins)

I confirm that the named PRCS and the planned work qualify for alternate entry

Name: _____

Signature: _____

Date: _____

Air Monitoring Results

Attendant will sample air ☐ Initially ☐ Every _____ minutes ☐ Continuously							
Device			Sequence or serial number	Calibration due date	Pre-use check performed by	Notes	
Time	Sampled by	☐ O ₂ (19.5–23.5%)	☐ (LEL/LFL <10%)	☐ CO (<25 ppm)	☐ H ₂ S (<10 ppm)	☐ Stratification	☐ Other:

Personnel Entry and Exit Record (to be completed as needed before and during work)

Attendant name:	Entrant name:	Entrant name:	Entrant name:	Entrant name:	Entrant name:	Entrant name:
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						

Notes (Use back of sheet if needed) _____

☐ Work Completed	☐ Other (Explain): _____
---	---

Supervisor's Signature: _____

Date: _____

DRIVER QUALIFICATIONS FOR COUNTY VEHICLES
(POLICY #731 OVERVIEW)

County vehicles are provided to support business activities and are to be used only by qualified and authorized employees. They are not to be considered a part of an employee's compensation and must not be used as an inducement for employment. In all cases, these vehicles are to be operated in strict compliance with motor vehicle laws of the jurisdiction in which they are driven and with the utmost regard for their care and cost-efficient use.

The County of Brunswick has an obligation to ensure, to the best of its ability, that all of vehicle operators are properly licensed and maintain a safe driving record. The purpose of this policy is to establish the County's position on safe motor vehicle operation. As a driver of a County vehicle, the authorized driver has been given certain privileges. He/she assumes the duty of obeying all motor vehicle laws, maintaining the vehicle properly at all times and, otherwise, following the policies and procedures outlined as follows. This policy applies to all employees and departments except the Sheriff's Office; they are subject to General Order E-01 Use and Care of Assigned Vehicles.

1. Responsibilities of Authorized Drivers

- 1.1 Authorized drivers of County vehicles are persons appointed by the department head.
- 1.2 County vehicles are to be used for County business only.
- 1.3 County employees and persons authorized to drive the County vehicles must have a valid driver's license for the class of the vehicle being operated and must be able to drive a vehicle. Obtaining a driver's license is a personal expense.
- 1.4 Authorized passengers are only those appointed to travel with authorized drivers while conducting County business.
- 1.5 County vehicles are not to be used for transport of family members.
- 1.6 All procedures for use of County vehicles (Brunswick County Personnel Policy #730) must be followed
- 1.7 Any person, using their personal vehicle for County business must meet the following criteria:
 - 1.7.1 Satisfy the County driver qualification requirements.
 - 1.7.2 Provide a certificate of insurance with limits of liability of at least \$100,000/300,000/50,000.
 - 1.7.3 The vehicle must pass the North Carolina Annual Safety Inspection

2. Driver Qualifications

- 2.1 Driver qualifications for operating a County vehicle at any time are as follows:
 - 2.1.1 Authorized person of County.
 - 2.1.2 Must be at least 18 years of age.
 - 2.1.3 Must meet licensing requirements as outlined in this policy.
 - 2.1.4 Will not qualify for a County vehicle if, during the last 36 months, the driver had any of the following experiences:
 - a) Been convicted of sale, handling or use of drugs or paraphernalia.

- b) Has automobile insurance canceled, declined or not renewed.
 - c) Has six (6) or more points against their NC drivers license.
 - d) Been convicted of an alcohol or drug-related offense while driving.
 - e) Has driver's license suspended or revoked.
 - f) Been convicted of three or more serious driving violations within the past three (3) years.
 - g) Been involved in two or more at fault accidents in a three (3) year period as determined by the Safety Review Board or law enforcement agency for the jurisdiction.
- 2.2 Any persons required to operate a County vehicle as part of their regular duties, who does not meet the aforementioned qualifications will not be permitted to operate a County vehicle until the department head has reviewed for clearance to resume operation.
- 2.3 Before an employee is given County driving privileges, the employee will be instructed by their immediate supervisor on operator responsibility and accident reporting procedures as it is outlined in this policy. The supervisor is accountable for ensuring that an employee is properly trained and can operate County equipment in a safe manner.

3. Review of Motor Vehicle Record

- 31 Brunswick County requires everyone who operates a County owned vehicle to submit a disclosure for which permits the County access to their motor vehicle records (MVR). This MVR requirement applies to employees operating County owned vehicles, as well as, authorized temporary employees using personal vehicles for County business.
- 32 State Motor Vehicle Records (MVRs) will be used as the source for verifying driver history. As a condition of operating a County vehicle, Safety/Risk Management and/or Human Resources may obtain and review MVR of employees operating County vehicles at least annually. It is the responsibility of each employee to report any driving infraction that changes the status of their license to their supervisor. Failure to do so would constitute a failure in job-related personal conduct (as defined in Brunswick County Personnel Policy #250, Section 11) which may result in disciplinary action.
- 33 Driving privileges may be withdrawn or suspended and/or the County vehicles removed for any authorized driver not meeting the stated requirements. In addition, appropriate disciplinary action may be taken.

4. Global Positioning System (GPS)

- 41 County-owned vehicles are equipped with a global positioning system (GPS) capable of capturing information in the vehicle. This device helps the County reduce vehicle accidents by identifying improper driving habits to improve safety for employees and citizens alike.
- 42 The County, at its discretion, may use or disclose any information generated by the GPS for any purpose, including, but not limited to, evaluating operational performance, imposing discipline, and defending and investigating accident claims.
- 43 Tampering with and/or obstructing the GPS system is strictly prohibited. Employees who violate this rule will be subject to disciplinary action up to and including dismissal.

**Brunswick County Transit Driver Notification System
Federal Driver Disclosure Form**

This form is to be used and kept by your agency in compliance with the Federal Driver's Privacy Protection Act and the NC General Statute 20-43.1. A copy for each driver must be kept on file for five years.

EMPLOYEE COMPLETES SECTION 1 AND SECTION 2

SECTION 1: EMPLOYEE MUST COMPLETE DRIVER'S LICENSE INFORMATION AND PROVIDE CORRECT ADDRESS:

Effective September 13, 1997, all major vehicle records are kept subject to the Federal Driver's Privacy Protection Act (FDPPA) and General Statute 20-43.1. The FDPPA and GS 20-43.1 require that personal information in the Division of Motor Vehicles records be kept closed to the public. Personal information from these records may be released to individuals or organizations that qualify under one of the fourteen (14) exceptions listed on the back of this form. These exceptions are summarized statements of permissible uses.

NAME OF DRIVER:

DL#: **STATE of DL:** **CLASS:**

DATE OF BIRTH: **DATE OF HIRE:**

ADDRESS:

CITY: **STATE:** **ZIP CODE:**

SECTION 2: EMPLOYEE MUST SIGN AND DATE:

By signing this form, you are granting the company (County) access to your personal information under exception number 13 of the FDPPA and GS 20-43.1.

SIGNATURE OF DRIVER:

DEPARTMENT:

DATE SIGNED:

TO BE COMPLETED BY AUTHORIZED AGENT ONLY:

My signature on this document acknowledges that I understand that improper release of information and/or false representation to gain information from the DMV's records is prohibited and subject to civil action.

COMPANY/AGENCY:

COMPANY/AGENCY APPROVAL AUTHORITY:

SIGNATURE: **TITLE** **DATE:**

TO BE COMPLETED BY DEPARTMENT AUTHORIZING TEMPORARY USE OF COUNTY VEHICLE

DEPARTMENT REQUESTING TEMP DRIVER:

DEPARTMENT HEAD OR DESIGNEE SIGNATURE: **DATE:**

**FEDERAL DRIVER'S PRIVACY PROTECTION ACT
ENACTED BY CONGRESS AUGUST 24, 1994**

Chapter 123, Section 2721 requires that personal information Division of Motor Vehicles' records be closed to the public. This refers to photos, social security numbers, driver's license numbers, names, addresses, telephone numbers and medical information.

GENERAL PURPOSES: Division of Motor Vehicles, and any officer, employee or contractor, therefore, shall not knowingly disclose or otherwise make available to any person or entity personal information about any individual obtained by the division in connection with a motor vehicle record.

Permissible Uses: Personal information SHALL be disclosed for use in connection with matters of:

- A. Motor vehicle or driver safety and theft
- B. Motor vehicle emissions
- C. Motor vehicle product alterations, recall or advisories
- D. Performance monitoring of motor vehicles and dealers by motor vehicle manufacturers
- E. Removal of non-owner records from the original owners if motor vehicle manufacturers to carry out purpose of the Automobile Information Act, the Motor Vehicle Information and Cost Saving Act, the National Traffic and Motor Safety Act of 1966, the Anti-Car Theft Act of 1992 and the Clean Air Act.

Exceptions:

Personal information MAY be released for the following reasons:

- 1. For use by any government agency, or any private persons or entity acting on behalf of a Federal, State or local agency in carrying out its functions.
- 2. For use in matters of motor vehicle or driver safety and theft, motor vehicle emissions, motor vehicle product alterations, recalls or advisories, performance monitoring of motor vehicles, motor vehicle parts and dealers, motor vehicle market research activities, including survey research, and removal of non-owner records from the original owner records of motor vehicle manufacturers.
- 3. For use in the normal course of business by a legitimate business, but only:
 - a. To verify accuracy of personal information
 - b. To obtain correct information, but only for purposes of:
 - 1. Preventing fraud by the individual
 - 2. Pursuing legal remedies against the individual
 - 3. Recovering on a debt or security interest against the individual
- 4. For use in connection with any civil, criminal, administrative, or arbitrate proceeding in any Federal, State or local court or agency (includes the execution of enforcement of judgments and orders or court orders)
- 5. For use in research activities and statistical reports
 - a. Personal Information must be:
 - 1. Published
 - 2. Redisclosed
 - 3. Used to contact individuals
- 6. For use by insurance companies in connection with claims investigation, antifraud activities, rating or underwriting
- 7. For use in providing notice of owners of towed or impounded vehicles
- 8. For use by private investigators or licensed security service
- 9. For use by employer to verify information regarding CDL
- 10. For use in connection with private toll facilities
- 11. For any other use if person has opportunity to refuse disclosure on DMV forms (Prohibited by NC General Statute 20-43.1)
- 12. For bulk surveys, marketing or solicitations (Disclosure must be in accordance with N.C. General Statute 20-43.1)
- 13. For use by any requestor that has obtained written consent from the individual to whom the information pertains
- 14. For any use specifically authorized under the law of the State that holds the record, if such use is related to the operation of a motor vehicle or public safety

5. Vehicle Use

- 5.1 Refer to Brunswick County Personnel Policy #730. County vehicles are provided for business purposes. Use of a County owned vehicle is a privilege extended only to the authorized employee. The privilege may be withdrawn at any time without notice by the County.
- 5.2 The following rules apply to use of County vehicles:
 - 5.2.1 Only authorized persons may drive. (Authorization is obtained from Department Head or Administration.
 - 5.2.2 Personal trailers, including boat and recreational vehicles, are not to be pulled.
 - 5.2.3 County vehicle is not to be driven while under the influence of alcohol or any controlled substance.
 - 5.2.4 Possession, transportation or consumption of alcohol or illegal drugs by anyone in the vehicle is not allowed.
 - 5.2.5 Obey all guidelines as outlined in the Brunswick County Personnel Policy.
- 5.3 Any exceptions to these rules requires advance, written approval by approved County manager or governing board. Violation of these rules will result in disciplinary action from removal of driving privileges to discharge.

6. Maintenance

- 6.1 Authorized drivers are required to properly maintain their County vehicles at all times. Vehicles should not be operated with any defect that would inhibit safe operation during current and foreseeable weather and lighting conditions. Preventive and scheduled maintenance to all County owned equipment will be determined by the Operations Department Service Center. See Administrative Procedure For Auto Property Damage Reporting in the accident reporting section of this manual.

7. Personal Cars Used on County Business

- 7.1 The County does not assume any liability for bodily injuries or property damage the employee may become personally obligated to pay arising out of an accident occurring in connection with operation of his/her own car. The reimbursement to the employee for the operation of his/her car on County business includes the allowance for the expense of automobile insurance. You are required by law to have minimum coverage of liability limits. The County does not specify and assumes no responsibility for any other coverage employees carry on their own cars since this is a matter of individual preference.

8. Traffic Violations

- 8.1 Fines for parking or moving violations are the personal responsibility of the assigned operator. The County will not condone nor excuse ignorance of traffic citations that result in court summons being directed to itself as owner of the vehicle.
- 8.2 Each driver is required to report all moving violations that impact their driver's license to their supervisor the next business day. This requirement applies to violations involving the use of any County, personal or other vehicle where an employee may jeopardize their ability to perform their duties. Failure to report driving violations that negatively impact driver's license or County business will result in appropriate disciplinary action.

- 8.3 Points are assessed by the NCDMV for serious driving violations. Brunswick County makes certain determinations for safe operators based on the points accumulated on an employees' driver's license. Below is a sample of points associated with infractions in accordance with NCDMV:
- Littering involving a motor vehicle - 1 point
 - Failure to stop for a siren - 3 points
 - Failure to stop at a posted stop sign - 3 points
 - Speeding more than 55 mph - 3 points
 - Reckless driving - 4 points
 - Hit and run, property damage only - 4 points
 - Failure to yield right-of-way to pedestrian pursuant to GS 20-158(b)(2)b—4
 - Passing a school bus loading or unloading children - 5 points
 - Aggressive driving – 5 points
- 8.4 Please be aware that traffic violations incurred during non-business hours may affect your driving status as well and are subject to review.

9. Accidents Involving County Vehicles

- 9.1 It is the responsibility of each employee authorized to operate a County vehicle to report any accidents involved in while on County business. The supervisor must be informed as well as highway patrol or sheriff's office if necessary. In the event of an accident:
- 9.1.1 Do not leave the scene of an accident until dismissed by the agency having jurisdiction. (Property damage in parking lots, where minimal damage and no injury has occurred; require driver and insurance information exchange after calling supervisor).
 - 9.1.2 Do not admit negligence or liability.
 - 9.1.3 Do not attempt settlement, regardless of how minor.
 - 9.1.4 Exchange driver and insurance information with the other driver. Take a photograph of the scene of accident if possible.
 - 9.1.5 Get name, address and phone number of witnesses if possible.
 - 9.1.6 Complete the property damage report in your vehicle.
 - 9.1.7 Turn all information over to your supervisor within 24 hours.

10. Post-Accident Drug/Alcohol Testing

- 10.1 Employees will be tested for the presence of drugs and alcohol following an on-the-job accident under the following circumstances:
- 10.1.1 If the employee is required to have a commercial driver's license (CDL) and the agency have jurisdiction at the scene requires the employee to surrender to a test in accordance with the North Carolina Department of Motor Vehicles regulations for cdl holders. Employees not required to carry a cdl will be tested where the following circumstances surrounding the accident apply:
 - a) Fatality - The loss of life of someone involved in the accident.

- b) Injury - An injury to someone involved that requires transport to a hospital or medical facility. (If employee was cited)
 - c) Tow - There is substantial property damage and/or the vehicle must be towed. (If employee was cited)
 - d) Reasonable cause exists for employees' actions contributing to the accident.
- 10.2 Post-accident testing for alcohol will be administered immediately following the accident or as soon thereafter as medically and legally possible, but no later than eight (8) hours after the accident. If the test is not administered within two (2) hours, the supervisor shall prepare and maintain a written record stating the reason(s) why the test was not administered within two (2) hours. If the test is not administered within eight (8) hours, the supervisor shall cease attempts to administer the test and shall prepare and maintain a written record stating the reason(s) why the test was not promptly administered.
- 10.3 Brunswick County also reserves the right to test employees at random and where there is reasonable suspicion that the accident was caused by the employee being under the influence of drugs or alcohol.

11. Preventable Accidents

- 11.1 A preventable accident is defined as any accident involving a County vehicle; whether being used for County or personal use or any vehicle while being used on County business which results in property damage and/or personal injury, and in which the driver in question failed to exercise every reasonable precaution to prevent the accident.
- 11.2 Classification of preventable accidents (NCDMV assesses points for each individually)
- 11.2.1 Following too close
 - 11.2.2 Driving too fast for conditions
 - 11.2.3 Failure to observe clearances
 - 11.2.4 Failure to obey signs
 - 11.2.5 Improper turns
 - 11.2.6 Failure to observe signals from other drivers
 - 11.2.7 Failure to reduce speed
 - 11.2.8 Improper parking
 - 11.2.9 Improper passing
 - 11.2.10 Failure to yield
 - 11.2.11 Improper backing
 - 11.2.12 Failure to obey traffic signals or directions
 - 11.2.13 Exceeding posted speed limit
 - 11.2.14 Driving While Intoxicated (DWI) or Driving Under the Influence (DUI) or

12. Corrective Action

- 12.1 Accidents incurred by employees call for careful evaluation to develop prevention methods and secure County property. The Safety Review Team, appointed by the County Manager, operates to determine prevention and/or chargeability whenever an accident occurs that involves an employee or County owned property.
- 12.2 The Safety Review Team (SRT) shall convene every 30 days to review accidents involving County vehicles. The review consists of the accident report from the agency having jurisdiction, the employee accident report form and any other pertinent factors surrounding the event. If necessary, the SRT will have a hearing in which the employee must provide a recount of the accident to best determine cause of accident. After an investigation, the SRT will determine if the accident is chargeable to the employee. At which time, the employee will receive notice and consequences involved. The County Manager will review every recommendation made by the SRT.
- 12.3 Recommendations for Corrective Action are as follows:
 - 12.3.1 *First Preventable Driving Incident:* Brunswick County has established the following guidelines with respect to operators of County owned vehicles involved in preventable accidents. If an employee is involved in a preventable accident, with no previous chargeable violations recorded in a three-year period; disciplinary action will result in one or more of the following consequences:
 - a) Counseled by immediate supervisor
 - b) Negative incident recorded on their annual performance plan
 - c) Provide a recount of the accident to the Safety Review Team (SRT) if needed
 - d) Depending upon the severity of the accident, driving privileges will be suspended or revoked
 - 12.3.2 *Second Preventable Driving Incident within a three-year period:* Disciplinary action for an employee who has incurred a previous chargeable incident within a three-year period will:
 - a) Counseled by immediate supervisor
 - b) Provide a recount of the accident to the Safety Review Team
 - c) Negative incident recorded on their annual performance plan
 - d) The employee may be suspended without pay
 - e) The employee may be required to pay for and attend a defensive driving course
 - f) Depending upon the severity of the accident and the circumstances surrounding; driving privileges may be suspended or the employee may be considered for termination.

12.3.3 *Third Preventable Driving Incident within a three-year period:* If an employee incurs a third preventable incident and/or six points within a three-year period, a combination of the following will occur;

- a) the employee will be recommended for immediate termination, suspension, demotion or transfer, as determined by the County Manager.

13. Backing incidents

- 13.1 Brunswick County recognized all vehicles have blind spots and has taken action to equip vehicles with mirrors and/or back up alarms to minimize blind spots for drivers. Vehicles not equipped with back up alarms have flashers and horns to use during backing to ensure a safe maneuver. Drivers must ensure the area behind the vehicle is clear in order to reverse the vehicle safely. When all precautions are in place when an employee is backing a vehicle and an accident occurs; the Safety Review Team reserves the right to apply investigative methods and discretionary judgment before charging employees with a preventable accident.

14. Thefts and Vandalism

- 14.1 In the event of the theft or vandalism of a County vehicle, notify local police immediately. Employee must complete an Auto/Property Loss form located in the appendix of this manual or on the County intranet site under Administration, Risk Management section.

EQUIPMENT OPERATIONS

POWERED INDUSTRIAL TRUCKS

This program outlines safety procedures for employees who operate powered industrial trucks (PITs) as part of their job duties. These requirements have also been established under OSHA Powered Industrial Trucks, 29 CFR 1910.178 with additional information found under the National Fire Protection Association (NFPA) 505, Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance and Operations, 2011 Edition, and the American National Standards Institute (ANSI) B56.1, 1975, Sections 5, 6 and 7.

The Purpose of this program is to protect employees, clients, residents, and any other individuals from hazards associated with forklift and powered burden carrier operations, to train and evaluate the performance of operators, and to comply with all regulatory requirements for the safe operation of such equipment.

1. Definitions

- 1.1 Fork Truck - Also called forklift truck, a fork truck is a small vehicle with two power-operated prongs at the front that can be slid under heavy loads and then raised for moving and stacking. Fork trucks can be powered by electricity, compressed natural gas, liquid petroleum gas, diesel fuel, or gasoline.
- 1.2 Powered Industrial Truck- Any 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.

2. Roles and Responsibilities

2.1 Department Head

2.1.1 The Department Head or Safety Manager ensures that a written program is in place for the safe operation of powered industrial trucks (PIT). The program is reviewed periodically to ensure compliance with this program. The Safety Manager is responsible for coordinating training for applicable employees on PIT safety and ensuring the training documentation is maintained.

2.2 Safety Manager/Supervisor

2.2.1 The manager/supervisor ensures that only authorized and trained employees operate PITs, and that operators comply with the procedures in this program. The manager/supervisor ensures that designated employees successfully complete the qualification procedures outlined in this program prior to operating any equipment.

2.3 Employees

2.3.1 Employees who operate PITs are responsible for complying with this program. Staff are also responsible for reporting equipment defects and discontinuing PIT operations when unsafe conditions exist.

3. Implementation

3.1 PIT Operator Qualifications

3.1.1 Operators must demonstrate their driving competence by passing a written test and completing a practical driving test for forklifts. Operators must demonstrate acceptable competence and knowledge in performing each task.

3.1.2 An evaluation of each Staff operator's performance shall be conducted by a qualified staff member at least every 3 years.

3.1.3 Refresher training shall be required if:

- a.) The operator has been observed to operate the vehicle in an unsafe manner.
- b.) The operator has been involved in an accident or near miss incident.
- c.) The operator has received an evaluation that reveals they are not operating the truck safely.
- d.) The operator is assigned to operate a different vehicle or a condition in the workplace changes in a manner that could affect safe operation.

4. General Safe Operating Procedures

4.1 Operators conduct a daily inspection of industrial trucks prior to operation. The vehicle shall not be placed in service if the inspection shows any condition that adversely affects the safety of the vehicle. Inspection checklists are retained for 30 days by the department the vehicle is assigned to.
(Page 57 & 58)

4.2 Vehicles are operated at a safe speed. Speeds are adjusted to compensate for surface conditions, visibility, load weight, vehicle or pedestrian traffic or any other circumstances affecting safe operation.

- 4.3 Only trained individuals are allowed to operate industrial trucks.
- 4.4 Accidents are reported immediately to the Supervisor and Risk Management
- 4.5 Riders are prohibited on forklifts and in cargo areas of other industrial trucks.
- 4.6 Persons may not be lifted with forklifts unless a lift cage is used.
- 4.7 Persons are not be allowed to pass under raised forks.
- 4.8 Horseplay or unsafe driving is not tolerated.
- 4.9 Maintenance or repair activities are to be performed by a qualified service technician.
- 4.10 Maintenance shall be conducted according to the manufactures recommendations.
- 4.11 Each vehicle is placed in the preventive maintenance checks and services program.
- 4.12 Operators do not place any part of their body between the mast and fork back support at any time.
- 4.13 Only attachments approved and listed by the manufacturer may be used.

5. Standard Safety Equipment/Precautions

- 5.1 Seatbelts are installed and utilized on each forklift.
- 5.2 Forklifts must have a functional horn, strobe light, and backup alarm.
- 5.3 Forklifts have a nameplate listing lift category, load rating, and load center prominently affixed.
- 5.4 Forklifts have a driver cage installed to protect the operator from falling materials.

6. Refueling/Battery Charging

- 6.1 Smoking, open flames or spark producing activities are prohibited in designated refueling or battery charging areas.
- 6.2 Forklifts are parked with the engine off, forks lowered and parking brake engaged prior to refueling or battery charging.
- 6.3 Electric cargo/burden carriers must have the forward-off-reverse switch in the "OFF" position, the power or key switch off and the parking brake set whenever the operator leaves the vehicle.
- 6.4 Propane tank refilling and replacement is only performed outside.
- 6.5 Gas tank regulators are closed with the engine running to burn fuel in the lines prior to disconnecting and replacing tanks.
- 6.6 Battery charging or replacement is not performed in locations that obstruct access to exits.

7. Loading and Unloading

- 7.1 Only handle stable and safely arranged loads; secure unstable loads.

- 7.2 Never lift or carry loads that exceed the rated capacity listed on the nameplate of the vehicle
- 7.3 Before entering a trailer with a forklift, ensure that the trailer brakes are locked, the rear wheels are chocked and the deck plate is secure.
- 7.4 Check the rated capacity of the trailer before entering to ensure that it can support the combined weight of the forklift and load.
- 7.5 Never carry anything on the overhead guard.
- 7.6 Never tilt the load forward unless depositing it onto a rack or stack.
- 7.7 Unsecured items shall not be transported in the cab of the vehicle.

The remainder of this page is left intentionally blank.

Powered Industrial Trucks Operator Evaluation

This evaluation must be completed for any employee who will be operating a powered industrial truck prior to operation. Evaluation is completed by a designated competent person. This evaluation is maintained by the Safety Manager.

Division:	Facility:
Location:	Date:
Operator:	Equipment:

Observable Behaviors	Yes	No	Comments
Completes pre-shift inspection			
Wears seatbelt			
Uses strobe light			
Operates at safe speed for Conditions			
Uses smooth and safe turning technique			
Eyes on work path (Looks before backing up)			
Sounds Horn at Corners, Doors and Blind Spots			
Travels in reverse when load obstructs vision			
Observes safe battery charging, refueling procedures			
Keeps load uphill on ramps/hills			
Observes load handling/stacking rules			
Parks truck properly - brake, power, neutral			

Results		
☐ Operator Evaluation Satisfactory	☐ Operator Evaluation Satisfactory After review of "At Risk" Items	☐ Operator Referred for Refresher Training and Follow-up Evaluation

Evaluator Name:	Title:
Signature:	Date:

**Powered Industrial Trucks
CNG/Gas/Diesel Fork Trucks
Operator's Daily Checklist**

*This checklist must be completed prior to each shift during which a CNG/gas/diesel fork truck will be operated.
This checklist is maintained on file by the Safety Manager.*

Division:	Facility:	
Location:	Date:	
Operator:	Equipment:	
Engine Off Checks	OK	Maintenance
Leaks – fuel, hydraulic oil, engine oil or radiator coolant		
Tires – condition and pressure		
Forks, top clip retaining pin and heel –check condition		
Load Backrest – securely attached		
Hydraulic hoses, mast chains, cables and stops – Check Visually		
Overhead guard – attached		
Finger guards – attached		
Leaks – fuel, hydraulic oil, engine oil or radiator coolant		
Propane tank (LP gas truck) – rust, corrosion, damage		
Safety warnings – attached (refer to parts manual for location)		
Battery – Check water/electrolyte level and charge		
All engine belts – Check visually		
Hydraulic fluid level – Check level		
Engine oil level – Dipstick		
Transmission fluid level – Dipstick		
Propane tank (LP gas truck) – Rust, corrosion, damage		
Engine air cleaner – Squeeze rubber dirt trap or check restriction alarm (if equipped)		
Fuel Sedimentor (Diesel)		
Radiator Coolant – Check Level		
Operator's Manual – In Container		
Nameplate attached and information matches model, serial number and attachments		
Seat Belt – Functioning Smoothly		
Hood Latch – Adjusted and securely fastened		
Brake Fluid – Check level		
Engine On Checks – Unusual noises must be investigated immediately		
Accelerator or direction control pedal – functioning smoothly		
Service & parking brake – functioning smoothly		
Steering Operation – functioning smoothly		
Drive Control – Forward/Reverse – functioning smoothly		
Tilt Control – Forward and Back – functioning smoothly		
Hoist and Lowering Control – functioning smoothly		
Attachment Control – Operation		
Horn and Lights – functioning		
Gauges: ammeter, engine oil pressure, hour meter, fuel, temp., instrument monitors		
Completed by:	Signature:	

ELECTRICAL SAFETY

It is recommended that the provisions contained in the following electrical safety checklist be adhered to in an effort to eliminate and/or reduce the incidence of electrical safety concerns:

- 1.1 Extension cords should:
 - 1.1.1 Be as short as possible.
 - 1.1.2 Never be used in areas where they will be stepped on and tripped over.
 - 1.1.3 Never be used on work benches or floor when liquids are present.
 - 1.1.4 Only be used as temporary wiring unless approved by Operation Services Department
- 2.1 Never attempt to repair or adjust electrical equipment unless authorized.
- 3.1 Do not use faulty or malfunctioning equipment unless the nature of the fault or malfunction is fully understood and is known not to be hazardous.
- 4.1 All electrical equipment must have an equipment ground, be double insulated or safetyapproved. For small appliances (any appliances with a two-prong plug), a surge protector must be used.
- 5.1 Pull on the plug, not the cord, when unplugging a cord from the power source.
- 6.1 Report damaged or frayed cords.
- 7.1 Do not use portable electrical equipment if standing on a wet surface or if hands are wet.
- 8.1 Do not block access to electrical control panels.
- 9.1 Know where the main control panel for your department is located. Learn how to disconnect circuit in case of accident.
- 10.1 Report all accidents immediately.
- 11.1 Contact your supervisor, if you need a power strip/surge protector.

ERGONOMIC WELLNESS - GENERAL

It is recommended that the provisions contained in the following office ergonomic checklist be adhered to in an effort to eliminate and/or reduce ergonomic concerns:

- 1.1 Maintain proper posture when performing tasks.
- 2.1 Alternate between different postures on a regular basis.
- 3.1 Use minimum force while striking the keys when keyboarding.
- 4.1 Keep a neutral position, where the forearms, wrists and hands are in a straight line.
- 5.1 Avoid awkward reaching for work tools such as telephone, mouse, and reference materials.
- 6.1 Avoid resting elbows, forearms or wrists on hard surfaces or sharp edges.
- 7.1 Alternate between work activities, which use different muscle groups to avoid overuse.
- 8.1 Proper exercises are a complement to a complete office ergonomics program.

FALL PROTECTION
OSHA STANDARD 1910.140

This plan is designed to enable supervisors and employees to recognize fall hazards on this job and to establish the procedures that are to be followed in order to prevent falls to lower levels or through holes in walking and working surfaces in accordance with OSHA Standard 1910.140. Each employee will be trained in these procedures and must strictly adhere to them except when doing so would expose them to a greater hazard. All employees must understand the seriousness of the situation and act when unsafe conditions persist.

It is the responsibility of supervisor to implement this fall protection plan. The supervisor will constantly observe work operation to ensure that safety policy and procedures are being followed. Any changes that are made to this plan must be approved by the department head.

1. Personal Fall Protection

- 1.1 Fall arrest systems, safety nets, and guardrails would be required where needed and feasible for work area.

2. Fall Protection Systems

- 2.1 Where conventional fall protection systems are infeasible or create a greater hazard, we plan to use the following system:
 - 2.1.1 We plan to use a safety monitoring system in addition to limiting the number of employees involved for the time necessary to complete the job. The (#) of employees will be observed and monitored by one safety monitor.
 - 2.1.2 Only employees with appropriate experience, skills, and training will be allowed to perform work in the area designated by this fall plan. All employees that will be working in this area under the safety monitoring system shall be trained and instructed on all known hazards.

3. Safety Monitoring System.

- 3.1 A safety monitoring system is a fall protection system in which a competent person is responsible for recognizing and warning employees of fall hazards. The duties of a safety monitor include:
 - 3.1.1 Warn by voice when an employee approaches an open edge in an unsafe manner.
 - 3.1.2 Warn by voice if a dangerous situation developing which cannot be seen by other employees involved in the task.
 - 3.1.3 Be competent in recognizing fall hazards

4. Control Zone System.

- 4.1 A controlled access zone is an area, which is designated and clearly marked, where work may take place without the use of a guardrail, safety net, or personal fall arrest systems to protect employees in the area. Control zone systems will comply with the following provisions:

Example: A platform, tower and /or toeboards will be installed to assist in controlling areas

FIRST AID

This policy does not supersede or replace an exposure control program that is required by 29 CFR 1910.1030 when there is foreseeable employee exposure to bloodborne pathogens arising from performance of an employees job duties, such as a designated first responder.

In the event an employee is injured on the job, first aid kits are available for minor treatment. In the event of a serious injury, 911 or medical response will be summoned. No employee is required to treat another's wounds. However, in the event "Good Samaritan" assistance is rendered, barrier protection is available in the first aid kits. The employer is not responsible for any exposure to blood or body fluids that the "Good Samaritan" may incur.

FITNESS FOR DUTY – EMS

The purpose of the Fitness for Duty program is to ensure employees are physically capable of performing their duties, and to explain the minimum requirements for continued employment. This policy applies to all EMS Division employees.

1. Physical Demands

- 1.1 Every EMS employee should understand the physical demands associated with working in the EMS environment which includes
- 1.1.1 The ability to exert up to 150 pounds of force occasionally, and/or up to 75 pounds of force frequently, and/or 20 pounds of force constantly to move objects.
 - 1.1.2 Working in and around emergency scenes involving hazardous materials, highway traffic, fires, and natural disasters
 - 1.1.3 Wearing protective equipment sometimes for extended periods of time
 - 1.1.4 Working in extreme environmental conditions potentially for extended periods of time
 - 1.1.5 Working in confined areas requiring a high degree of agility and mobility
 - 1.1.6 Physical demand requirements are for Very Heavy Work.

2. Personal Health

- 2.1 Emergency Services employee's should be in good health themselves; to be able to care for others.
 - 2.1.1 All employees will be screened annually for health problems at the expense of the County.
 - 2.1.2 This screening will include at a minimum:
 - a) Blood work
 - b) Anthropometric measurements
 - c) Pulmonary function test
 - d) Body Composition Analysis
 - e) Resting 12 lead ECG
 - f) Cardiac stress test
 - g) Vision and hearing test
 - h) Physician consultation with recommendations for improvement
 - i) The screening process will certify the employees fitness for duty
- 2.2 Any employee who according to the screening process is unfit for duty will be referred to his or her personal physician for follow up and will be placed on administrative leave until cleared to safely perform the functions of the job.
 - 2.2.1 Employee may use sick or vacation time to cover absence from duty.
 - 2.2.2 Employees' physician must certify in writing that the employee is capable of returning to work.
 - 2.2.3 Any employee failing to obtain certification from their physician entitling them to work as an EMT or Paramedic will either be reassigned to an open position in the department or will be given preference for other positions within County Government.
- 2.3 Any employee who fails to complete the annual screening process will be immediately suspended without pay until the screening is completed. If after one month the employee is not compliant, he or she will be terminated from employment.

GLOBAL HARMONIZATION SYSTEM

The purpose of the Global Harmonization System is to reduce the occurrence of workplace illnesses and injuries caused by hazardous chemicals. The program is designed to; achieve compliance within Brunswick County for Hazard Communication title 29 Code of Federal Regulations 1910.1200 and to provide information and training for employees who work with hazardous chemicals.

In accordance with the standard, all employees exposed to handling or the use of hazardous chemicals in the workplace must have a written hazard communication program made available upon request. In addition, this written program will be provided to designated employee representatives and authorized representatives of the North Carolina Commissioner of Labor upon request.

Under the program, employees are informed of the contents of the Hazard Communication Standard, the hazardous properties of chemicals with which they work, safe handling procedures and measures to take to protect them from chemical hazards. Employees are informed of the hazards associated with non-routine tasks as well. The following describes the working components of the standard required in Brunswick County;

- (1) Written Program - Describe how the criteria specified in the standard will be met;
- (2) Determination of Hazards -Include a list of hazardous chemicals known to be present using the chemical or common name as it appears from the manufacturer. A material safety data sheet to acCounty each product used in the workplace;
- (3) Labels & Warnings – Appointed responsible person will ensure all hazardous chemical in the facility are labeled and updated as necessary.
- (4) Multi employer Worksites- Describe methods used to inform any contractor with employees in the workplace of hazards that may be exposed to and appropriate protective measures.
- (5) Training- Everyone who is potentially exposed to hazardous chemicals in the workplace will receive initial training on the Hazard Communication Standard and the safe use of chemicals in the workplace by the supervisor, director or the risk manager.

1. Written Program

- 1.1 Brunswick County intends to protect the safety and health of our employees who are exposed to hazardous chemicals in the workplace, and to comply with the provisions of 29 CFR 1910.1200.
- 1.2 The Supervisor of each departmental division is responsible for monitoring all related activities to ensure compliance with both the intent and specifics of this program.
- 1.3 Each supervisor will be held responsible for strict adherence to these policies and will closely monitor all activities involving hazardous chemicals.

- 14 Each employee will carefully follow established work practices and promptly report observed or potential problems to supervision.

2. Determination of Hazards

- 2.1 A list of all hazardous chemicals for each workplace has been made and is readily available, upon request, to any employee, working on any shift. A Safety Data Sheet (SDS) for each hazardous chemical on the list referenced above is on file. The supervisor and shop foreman are responsible to ensure that the list of hazardous chemicals is kept current and that a current SDS for each hazardous chemical used is on hand. The employees are made aware of each potential hazard presented by each product and the chemicals causing potential hazard as it is provided on the SDS.

3. Labels and Warnings

- 3.1 All containers of hazardous chemicals in each workplace will be conspicuously labeled with the identity of the chemical (same as on the applicable SDS), and the appropriate hazard warnings. If the chemical is a known or suspected cancer causing agent (carcinogen), or if it is known to affect a specific organ of the body, this information will also be placed on the container label. The person having supervisory responsibility for the storage or use of each hazardous chemical will ensure that such labels are not defaced and that they remain legible at all times. Supervisors and shop foremen will ensure that an adequate supply of labels are kept on hand and made available to the responsible supervisors.
- 3.2 Supervisor and shop foreman are responsible for anticipating, as much as possible, the hazards that would be present for non-routine tasks, such as chemical spill or container rupture. Clean-up procedures and proper personal protective equipment shall be considered and adequate training for such tasks shall be addressed.

4. Multi Employer Worksites (Contractors)

- 4.1 When an outside contractor will be used, it will be the responsibility of supervisor and/or shop foreman to advise the contractor of any hazardous chemicals to which their employees may be exposed and the appropriate protective measures to be taken. Conversely, it will be the same person(s) responsibility to determine if the contractor will be using any hazardous chemicals during this work that would expose employees. Appropriate training and protective measures must be taken in order to protect employees. Prior to any work being performed by an outside contractor involving hazardous chemicals, the supervisor and/or shop foreman are to be advised.
- 4.2 All employees exposed to any hazardous chemicals will complete an information and training program which includes at least the subjects listed below. New employees must

complete similar instruction before initial exposure to any hazardous chemical in the workplace.

5. Training

- 5.1 Adequate training of all employees exposed to hazardous chemicals will be given by the supervisor/director or risk manager.
- 5.2 Employee training shall include at least the following:
 - 5.2.1 Methods and observations used to detect the presence or release of a hazardous chemical in the work area such as monitoring devices, appearance or odor.
 - 5.2.2 The physical and health hazards associated with each chemical, as specified in the MSDS.
 - 5.2.3 Action that employees can take to protect their own safety and health, including specific procedures that have been established for normal work practices, emergency procedures, and policies on the use of personal protective equipment.
 - 5.2.4 Details of the Hazard Communication Program, including an explanation of the labeling system used on in-house containers of hazardous chemicals. Also, details of how employees can obtain and use information contained in the MSDS.
- 5.3 It is the intent of Brunswick County Commissioners and management to protect the safety and health of each employee, our most valuable and valued asset. By following correct procedures, no employee should experience any harmful effects from working with chemicals in their workplace.

HEARING CONSERVATION

Under the current OSHA Standard for Occupational Noise Exposure (29 CFR 1910.95) all workers exposed to 85 dBA Time Weighted-Average (TWA) are to be included in a hearing conservation program. It is important to note that for work shifts in excess of 8 hours, the 85 dBA TWA is reduced. For example, exposures in excess of 83.4 dBA for a 10-hour work shift and exposures in excess of 82.1 dBA for a 12 hour work shift necessitate inclusion in a hearing conservation program. An effective hearing conservation program is defined to include:

- a) An assessment of noise exposure
- b) Annual audiometric tests of exposed workers
- c) Maintenance of noise and hearing data records
- d) Noise abatement and/or administrative controls
- e) Availability of hearing protectors
- f) Employee training and education

An ongoing noise exposure evaluation program is required under the OSHA Standard for Occupational Noise Exposure (29 CFR 1910.95) when “information indicates that any employee’s exposure may equal or exceed an 8 hour Time-Weighted Average of 85 dBA . Monitoring shall be repeated whenever a change in production, process, equipment or control increases noise exposure to the extent that: 1) Additional employees may be exposed at or above the action level or 2) the attenuation provided by the hearing protectors being used by the employees may be rendered inadequate.” A complete sound survey of the plant is recommended at least every two years.

After determining the noise level, and if it is 85 dBA TWA, then it is required that employers provide to the employees the following:

- a) Annual hearing tests
- b) Annual hearing conservation training
- c) Hearing protection (optional or mandatory)
- d) The OSHA Noise Standard (29 CFR 1910.95) posted
- e) Notification of the results of the sound survey

If the Noise level exceeds 90 dBA, the OSHA Noise Standard requires that engineering and administrative control measures must be investigated, evaluated and where feasible, utilized to reduce employee exposures. It is important that any measure investigated, utilized, or evaluated to reduce the noise levels be documented.

LAB SAFETY
OSHA STANDARD 1910.1450

1. General

- 1.1 The general intent of the chemical hygiene plan for Brunswick County is to:
 - 1.1.1 To protect laboratory employees from health hazards associated with the use of hazardous chemicals in our laboratory,
 - 1.1.2 To assure that our laboratory employees are not exposed to substances in excess of the permissible exposure limits as defined by OSHA in 29 CFR 1910 Subpart Z.
- 1.2 The plan will be available to all employees for review and a copy will be located in the Health Department and Utilities.
- 1.3 This plan will be reviewed annually by the department head and updated as necessary.
- 1.4 Department Directors or their designee will act as the Chemical Hygiene Officer (CHO).

2. Standard Operating Procedures (SOP's)

- 2.1 SOP's are located in each laboratory and are applicable as needed when situations arise such as:
 - 2.1.1 Accidents, spills
 - 2.1.2 Avoidance of routine exposure
 - 2.1.3 Choice of chemicals and storage
 - 2.1.4 Compressed gases
 - 2.1.5 Corrosive agents
 - 2.1.6 Eating, drinking, smoking, etc.
 - 2.1.7 Electrically powered laboratory apparatus
 - 2.1.8 Equipment and glassware
 - 2.1.9 Exiting
 - 2.1.10 Fires, explosions
 - 2.1.11 Horseplay
 - 2.1.12 Mouth suction
 - 2.1.13 Personal apparel
 - 2.1.14 Personal housekeeping

- 2.1.15 Personal protection
- 2.1.16 Planning
- 2.1.17 Pressurized and vacuum operations
- 2.1.18 Low temperature procedures
- 2.1.19 Unattended operations
- 2.1.20 Use of hood
- 2.1.21 Vigilance
- 2.1.22 Waste disposal and storage and
- 2.1.23 Working alone
- 2.2 Additionally, if a biological and/or laser safety programs are needed they will be located each laboratory location.

3. Control Measures to Reduce Employee Exposure to Hazardous Chemicals

- 3.1 Where applicable, the following controls measures will be used to reduce employees exposure to hazardous chemicals:
 - 3.1.1 Laboratory fume hoods
 - 3.1.2 Biological safety cabinets
 - 3.1.3 PPE
 - 3.1.4 Respirators shall be used in accordance with the respiratory protection program of Brunswick County and with the OSHA respirator standard 29 CFR 1910.134.
 - 3.1.5 Employees will be instructed on the location and use of eye wash stations and safety showers. Supervisors will be responsible for location and communication of such equipment.
 - 3.1.6 Employees will be trained fire protection systems within the lab.

4. Maintenance of Fume Hoods and Other Protective Equipment

- 4.1 FUME HOODS will be inspected in accordance with the local fire marshal and manufacturers recommendation.
- 4.2 Lab employees will maintain fume hoods according to the SOP for that location based on manufacturer's recommendations.

5. Employee Information and Training

- 5.1 Each employee covered by the laboratory standard will be provided with information and training so that they are apprised of the hazards of chemicals present in their work area. This training will be given at the time of initial assignment and prior to new assignments involving different exposure situations.

- 5.2 The training/information session shall include:
 - 5.2.1 The contents of 29 CFR 1910.1450 and its appendices
 - 5.2.2 The availability and location of the written chemical hygiene plan.
 - 5.2.3 Information on OSHA permissible exposure limits (PELs) where they exist, and other recommended exposure limits.
 - 5.2.4 Signs and symptoms associated with exposure to hazardous chemical in laboratories.
 - 5.2.5 Location of reference materials, including all MSDSs received, on the safe handling of chemicals in laboratories.
 - 5.2.6 Methods to detect the presence or release of chemicals (i.e. monitoring, odor thresholds, etc.).
 - 5.2.7 The physical and health hazards of chemicals in laboratory work areas.
 - 5.2.8 Measures to protect employees from these hazards, including:
 - a) Standard operating procedures;
 - b) Work practices;
 - c) Emergency procedures;
 - d) Personal protective equipment; and
 - e) Details of the chemical hygiene plan.
- 5.3 Department Directors are responsible for assuring employees have the proper training for the duties they perform.
- 5.4 Each employee will sign a form documenting that they have received training.
- 5.5 Each lab supervisor is responsible for developing standard operating procedures and communicating it to affected employees.

6. Prior Approval for Specific Laboratory Operations

- 6.1 Certain laboratory procedures which present a serious chemical hazard require prior approval from the department head before work can begin. For this facility, these procedures include:
 - 6.1.1 Work with select carcinogens;
 - 6.1.2 Work with reproductive hazards;
 - 6.1.3 Work with neurotoxins; and
 - 6.1.4 Work with acutely hazardous chemicals (Consider the 8 physical hazards as well as the health hazards in this determination).

7. Medical Consultation and Examination

7.1 The local hospital shall provide, to affected employees, medical attention including follow-up examinations which determines is necessary under the following circumstances:

7.1.1 Whenever an employee develops signs and symptoms associated with a hazardous chemical to which they may be exposed, the employee shall be provided an opportunity to receive appropriate medical examination. The employee shall contact the Chemical Hygiene Officer to initiate the medical program; and/or

7.1.2 Where exposure monitoring reveals an exposure level routinely above the OSHA action level (AL) (or in the absence of an action level), exposure above the OSHA permissible exposure level (PEL) for OSHA regulated substances for which there are medical monitoring and medical surveillance requirements, medical surveillance shall be established for that employee. Currently our laboratory uses:

- a. _____ (e.g. Benzene)
- b. _____ (e.g.. Formaldehyde)
- c. _____ (list other substances covered)

All of which have a separate OSHA standard with medical surveillance requirements.

7.1.3 Whenever an event takes place in the work area, such as a spill, leak, explosion or other occurrence resulting in the likelihood of a hazardous exposure, the affected employee, laboratory or custodial, shall be provided an opportunity for a medical consultation. This consultation is for the purpose of determining the need for a medical examination.

7.1.4 All medical examinations and consultations are provided by a licensed physician, or supervised by a licensed physician. These examinations are provided without cost to the employee, without loss of pay, and at a reasonable time and place.

7.1.5 The lab supervisor will provide the following information to the physician:

- a) Identity of the hazardous chemical to which the employee may have been exposed;
- b) A description of the conditions of the exposure including exposure date if available; and
- c) A description of signs and symptoms of the exposure that the employee is experiencing (if any).

7.1.6 The written opinion that the County receives from the physician shall include:

- a) Recommendations for future medical follow-up;

- b) Results of examination and associated tests;
 - c) Any medical condition revealed which may place the employee at increased risk as the result of a chemical exposure; and
 - d) A statement that the employee has been informed by the physician of the results of the examination/consultation and told of any medical conditions that may require additional examination or treatment.
- 7.1.7 The material returned to Brunswick County by the physician shall not include specific findings and diagnosis which are unrelated to occupational exposure.

8. Responsibilities Under the Chemical Hygiene Plan

- 8.1 The Department head will designate as the chemical hygiene officer (CHO)
 _____(insert position)
 _____for (location).
- 8.2 A chemical hygiene committee shall be formed. The membership list and minutes of the meetings are filed in/at _____(insert location) for employee review.

_____ Chemical Hygiene Officer;
 _____ Laboratory Supervisor;
 _____ Project Director; and
 _____ Laboratory Worker.

9. Additional Protection for Work With Select Carcinogens, Reproductive Toxins, and Chemicals With High Acute Toxicity

- 9.1 When any of these chemicals are used, the following provision shall be employed where appropriate:
- 9.1.1 Establishment of a designated area;
 - 9.1.2 Use of containment devices such as fume hoods;
 - 9.1.3 Procedures for safe removal of contaminated waste;
 - 9.1.4 Decontamination procedures.

[Note:According to the standard, a SELECT CARCINOGEN means any substance which meets one of the following criteria: (i) it is regulated by OSHA as a carcinogen; or (ii) it is listed under the category, “known to be carcinogens”, in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or (iii) it is listed under Group 1 (“carcinogenic to humans”) by the International Agency

for Research on Cancer Monographs (IARC)(latest editions); or (iv) it is listed in either Group 2A or 2B by IARC or under the category, “reasonably anticipated to be carcinogens” by NTP, ...]

10. Emergency Response

Hazardous Waste Operations and Emergency Response (developed in response to SARA Title III). Please review these two standards and develop appropriate emergency procedures for your facility if your facility is covered by one of these standards.

Appendix_ is our County’s emergency action plan under 1910.38.

Appendix___ is our County’s emergency response plan under 1910.120.

11. Laboratory Standard Training

11.1 Occupational exposure to hazardous chemicals in laboratories standard (29 CFR 1910.1450):

11.1.1 Content of the standard and appendices;

11.1.2 Location and explanation of the chemical hygiene plan;

11.1.3 Location of reference materials and material safety data sheets (MSDS); and

11.1.4 Details of access to medical consultation and management system.

11.2 Physical Hazards:

11.2.1 Combustible liquids;

11.2.2 Compressed gas;

11.2.3 Explosive;

11.2.4 Flammable;

11.2.5 Organic peroxide;

11.2.6 Pyrophoric;

11.2.7 Unstable (reactive); and

11.2.8 Water reactive.

11.3 Health Hazards:

11.3.1 Local:

a. Irritants, and

b. Corrosives.

11.3.2 Systemic:

a. Toxics:

- Acute/Chronic- toxics

- Nervous System Effects;

- Respiratory System Effects; and
 - Reproductive System Effects.
 - b. Sensitizers; and
 - c. Carcinogens.
- 11.4 Route of Exposure:
 - 11.4.1 Inhalation;
 - 11.4.2 Skin Absorption; and
 - 11.4.3 Ingestion.
- 11.5 Amount of Absorption:
 - 11.5.1 Gases/Vapors;
 - 11.5.2 Particulates:
 - a. Dust
 - b. Mist
 - c. Fume
- 11.6 Dose:
 - 11.6.1 Work Practices;
 - 11.6.2 Personal Hygiene;
 - 11.6.3 Weight;
 - 11.6.4 Personal Protective Equipment; and
 - 11.6.5 Environmental Controls.
- 11.7 Duration of Exposure
- 11.8 Exposure Limits Including PELs:
 - 11.8.1 Definition;
 - 11.8.2 Established by:
 - a. Chemical Similarity;
 - b. Animal Studies; and
 - c. Human Studies.
- 11.9 Air Sampling
 - 11.9.1 Required by OSHA;
 - 11.9.2 Employee Reports of Illness;
 - 11.9.3 Confined Space Work; and
 - 11.9.4 Other.

- 11.10 Response:
 - 11.10.1 Age;
 - 11.10.2 Gender;
 - 11.10.3 Body Size;
 - 11.10.4 Health Status;
 - 11.10.5 Personal Habits; and
 - 11.10.6 Other Exposures.
- 11.11 Employee Concerns:
 - 11.11.1 Symptoms Limited/Many Causes;
 - 11.11.2 Documentation;
 - 11.11.3 Referral; and
 - 11.11.4 Refusal to Work.
- 11.12 County Specific Standard Operating Procedures

12. Laboratory Rules Summary 1910.1450

- 12.1 All laboratories where there is the potential for employee exposure to a hazardous chemical are covered.
- 12.2 Exposure monitoring must be conducted to assure compliance with OSHA Permissible Exposure Limits (PELs).
- 12.3 The employer must notify the employee to air sampling results within 15 days of receipt of results.
- 12.4 The Chemical Hygiene Plan includes:
 - 12.4.1 Methods used to keep exposure below the PELs;
 - 12.4.2 Standard Operating Procedures (SOPs) for health and safety;
 - 12.4.3 Control measures and protective equipment;
 - 12.4.4 Fume hood inspection and maintenance;
 - 12.4.5 Medical consultation and exams;
 - 12.4.6 Designating a Chemical Hygiene Officer and/or committee;
 - 12.4.7 Employee notification and training; and
 - 12.4.8 Additional employee protection measures.
- 12.5 Employee Information and Training – Information and training must be provided to employees ensuring them of:

- 12.5.1 Hazards present in their work area;
 - 12.5.2 The contents of the standard;
 - 12.5.3 The Chemical Hygiene Plan;
 - 12.5.4 PELs for materials in the lab;
 - 12.5.5 Reference materials on chemical safety;
 - 12.5.6 MSDS location and availability;
 - 12.5.7 Protective measures; and
 - 12.5.8 Signs and symptoms of chemical exposure.
- 12.6 Medical Surveillance – Medical consultation and exams must be provided:
- 12.6.1 Whenever an employee displays signs and/or symptoms of chemical exposure;
 - 12.6.2 When exposure monitoring exceeds an action level or PEL that requires medical surveillance; and following a spill or leak or other emergency.
- 12.7 Hazard Identification – With respect to labels and MSDSs:
- 12.7.1 Incoming labels must not be removed or defaced;
 - 12.7.2 MSDSs received with incoming shipments must be maintained and accessible;
 - 12.7.3 Employer must determine if a material produced in the laboratory is hazardous; and if material produced in the lab and shipped must meet the Hazard Communication Standard for MSDS and labeling.
- 12.8 Respirators – When respirator protection is required, the OSHA respirator standard (29 CFR 1910.134) must be followed.
- 12.9 Recordkeeping – All exposure monitoring and medical surveillance data must be maintained in accordance with the OSHA standard for recordkeeping (29 CFR 1910.1020).

LOCK OUT / TAG OUT PROCEDURE ***OSHA STANDARD 1910.147***

The County of Brunswick Lockout / Tagout Procedure (LTP) has been developed to provide maximum protection to employees and equipment. This LTP is in accordance with OSHA Standard 1910.147 and establishes a program which provides the requirements for the lockout and/or tagout of energy isolating devices, such as, but not limited to, equipment controls, valves, switches, disconnects, etc. This LTP shall be used to ensure that equipment or machine(s) or piping are isolated from all potentially hazardous energy, and locked out and/or tagged out before personnel perform any servicing or maintenance activities where the unexpected energization, start-up, or release of stored energy could result in personal injury or damage to the equipment, machinery and/or piping being worked on.

Personnel and equipment safety is the primary objective of this procedure. The success of the County's LTP depends upon all participating personnel having a thorough and complete understanding of the procedures; proper supervision and direction from authorized personnel; strict compliance with the LTP procedures by all departmental personnel as well as personnel from other departments and contract personnel.

1. Definitions

- 1.1 **Cleared** - Equipment control points tagged and/or locked in the “OFF” position with hold order tag or lockout prior to performing work.
- 1.2 **Clearance File** - An official file in which released clearance sheets are stored in sequential order.
- 1.3 **Clearance Holder** - Personnel authorized by the Supervisor or Lead Personnel to hold clearance listed.
- 1.4 **Clearance Log Book** - An official log book used to record clearances in sequential order, to include clearance number, equipment, who the clearance is assigned to and date released, as a minimum.
- 1.5 **Clearance Notebook** - An official notebook in which the clearance sheet(s) are maintained until it has been released.
- 1.6 **Clearance Sheet** - An official sheet used by the Supervisors and Lead Personnel for each clearance being issued. It contains all pertinent information associated with the clearance(s).
- 1.7 **Equipment** - Any machine, device or apparatus either electrical, mechanical, or hydraulic including all piping.
- 1.8 **Grounding Strap** - Device used to provide energy a path to ground. Some electrical work may require the use of grounding straps to ensure safe working conditions.
- 1.9 **Hold Order Tag (HOT)** - The hold order tag is a red warning tag used to indicate that equipment is under a clearance and SHALL NOT be operated or energized. Written upon each hold order tag is important information such as the apparatus the tag should be applied to, the attachment location, time, date and the identification of the employee applying the tag. Hold order tags SHALL be applied to all points where energy isolation protection has been provided and are to be numbered the same as the related clearance sheet. Under NO circumstances SHALL any equipment be operated until all hold order tag(s) has been removed by authorized employees. Any number of hold order tags may be used with an authorized clearance.
- 1.10 **Lockout/Tagout Program (LTP)** - The program outlining the method which shall be followed in requesting, applying and releasing a clearance.
- 1.11 **Lockout** - The use of locking device(s) to secure the main points of control of equipment in the “OFF” position to prevent accidental startup or energizing. Authorized clearance holders requesting a clearance may request the placement of lock out devices.

- 1.12 **Lockout Station** - Location where lockout/tagout devices may be found.
- 1.13 **Official Clearance List** - An official list that is maintained in the clearance notebook of those persons authorized to hold a clearance. The list shall contain the person's name, title, pager number, cell phone number and home phone number.
- 1.14 **Operator** - An treatment plant operations personnel authorized by the Supervisor or Instrumentation & Electrical Lead Personnel or Maintenance Lead Personnel to perform tasks necessary to establish a clearance, such as a hold order tag (HOT).
- 1.15 **Supervisor** - The person(s) authorized to issue and close clearances on equipment within their treatment or distribution facility, (i.e., Northwest Water Treatment Facility, Highway 211 Water Treatment Facility or Booster Pumping Station No. 6), such as the Superintendent or Chief Utility Plant Operator.

2. Lines of Responsibility

- 2.1 Department Directors and the Supervisors are responsible for:
 - 2.1.1 Coordinating the development of the Lockout/Tagout Program (LTP) and associated standard operating procedures;
 - 2.1.2 Reviewing proposed updates and modifying the LTP accordingly;
 - 2.1.3 Ensuring compliance with the LTP through periodic inspections and evaluations;
 - 2.1.4 Informing treatment plant and distribution personnel of any changes or additions to the LTP;
 - 2.1.5 Coordinating initial LTP training of treatment plant and distribution personnel;
 - 2.1.6 Performing an annual audit of each facility's LTP to ensure that the Program and all its provisions are being followed.
- 2.2 The Supervisors are responsible for:
 - 2.2.1 Ensuring that employee LTP training is conducted and documented as required;
 - 2.2.2 Preparing and updating the official clearance list;
 - 2.2.3 Conducting regular meetings with lead personnel, treatment plant personnel and distribution personnel to determine if there are any problems with the application of the LTP;
 - 2.2.4 Informing Director or appointee of any problems with the LTP;
 - 2.2.5 Ensuring that contractors are provided with information and instruction on the LTP;
 - 2.2.6 Performing semiannual audits of outstanding clearances, as a minimum.

- 2.3 The Supervisors and Lead Personnel are responsible for:
 - 2.3.1 Assuming total control and responsibility in all applications of the LTP during each shift;
 - 2.3.2 Ensuring compliance from all affected Brunswick County employees;
 - 2.3.3 Conducting annual employee training in the LTP uses, procedures and restrictions;
 - 2.3.4 Reporting any problems with the LTP to the Director or appointee;
 - 2.3.5 Assuring that the issued clearance(s) provides a safe work environment for all affected employees and contractors;
 - 2.3.6 Ensuring that assigned employees are trained in the LTP;
 - 2.3.7 Informing shift personnel of any problems relating to the LTP.
- 2.4 The Clearance Holder is responsible for:
 - 2.4.1 Requesting a clearance from Department Director, Supervisor, or Lead Personnel;
 - 2.4.2 Checking the protection provided by a clearance by verifying a test of the clearance, as demonstrated by the attempted energization, startup, etc. of affected equipment and/or machinery and/or piping, prior to beginning related work;
 - 2.4.3 Notifying all affected employees prior to placement of protective lockout and/or tagout devices and informing them of the extent and limits of the clearance;
 - 2.4.4 Reporting the status of clearance-related work to the Supervisor or Lead Personnel and all affected employees as required;
 - 2.4.5 Ensuring that all temporary protective devices, such as grounding straps, or tools and/or other equipment, have been removed prior to the closing of the clearance.
- 2.5 All affected employees are responsible for:
 - 2.5.1 Complying with all LTP training instructions, conditions and requirements;
 - 2.5.2 Having a thorough working knowledge of the LTP;
 - 2.5.3 Informing the Supervisor of any problems associated with the LTP application;
 - 2.5.4 Asking questions when in doubt.
- 2.6 Contractors are responsible for:
 - 2.6.1 Obtaining instructions from the Supervisor on the LTP;
 - 2.6.2 Following the conditions and requirements outlined in the LTP;
 - 2.6.3 Immediately reporting all problems encountered with the LTP to the Supervisor;
 - 2.6.4 Providing all affected contractor employees with instructions and training regarding the requirements of the County's LTP.

3. Training

- 3.1 The Department Director will coordinate initial LTP training for Supervisors and Lead Personnel;
- 3.2 All departmental Supervisors and Lead Personnel shall obtain initial LTP training to insure the knowledge and necessary skills for the safe application of the LTP;
- 3.3 Supervisors and Lead Personnel shall provide initial and annual training to all affected personnel before they are permitted to participate in the County's LTP;
- 3.4 Refresher training shall be provided whenever there is a change implemented with the LTP;
- 3.5 Supervisors shall document all personnel training sessions and file all appropriate documentation in personnel training files. Initial training shall be documented using the forms provided as Appendices in this program, with all subsequent LTP employee training be documented in the same manner.
- 3.6 Supervisors shall provide contractor management personnel with instructions and training on LTP before contractor's employees are allowed to participate in clearance-related work.

4. Authority to Issue and Hold Clearances

- 4.1 Clearance shall be issued only by the Supervisor to personnel whose names appear on the official clearance list;
- 4.2 The Department Director and Supervisors are responsible for assigning personnel to and approving the official clearance list;
- 4.3 The Department Director and Supervisors may use any combination of the following criteria to determine which personnel are qualified to be included on the official clearance list:
 - experience
 - training
 - job title
- 4.4 In certain situations it may be necessary to temporarily add contractor personnel to the official clearance list. In such cases, the Department Director or Supervisor shall add ONLY trained and qualified contractor management personnel to the official clearance list;
- 4.5 Supervisors shall insure that contractor personnel training is approved LTP training.

5. Number of Authorized Personnel on a Clearance

- 5.1 There is no limit to the number of authorized personnel that may be on the same clearance. The number of personnel on a clearance is to be decided by the type and scope of work required by each craft.

ALL AUTHORIZED EMPLOYEES ON A CLEARANCE SHALL VERIFY THEIR SAFETY BY PERSONALLY CHECKING THE PROTECTION PROVIDED BY THE CLEARANCE.

6. PROCEDURES.

- 6.1 Conditions for issuing a clearance:

- 6.1.1 A clearance is required whenever necessary to isolate switches, power disconnects, circuit breakers, valves, or other equipment devices from all sources of hazardous energy. When properly applied, a clearance will encircle the effected equipment with a line of isolation protection. ALL clearances SHALL be maintained during the entire period work is being performed on the equipment, machinery and/or piping;
- 6.1.2 No clearance-related work shall be performed on affected equipment, machinery and/or piping until the clearance holder is satisfied that the equipment is safe to work on.

- 6.2 Issuing a Clearance - TAGS ONLY:

- 6.2.1 The clearance holder (personnel authorized to receive a clearance) shall request a clearance from the Supervisor or Lead Personnel ONLY. The request shall be made as far ahead of the date needed as possible;
- 6.2.2 The Supervisor and Lead Personnel shall determine if the equipment, machinery, and/or piping in question can be cleared;
- 6.2.3 If the equipment can be cleared, the Supervisor or Lead Personnel shall generate a hold order number from the clearance logbook. This number will be the next number in sequence to the previous hold order number issued;
- 6.2.4 The Supervisor or Lead Personnel shall record the hold order number in the clearance log book, including the equipment, machinery and/or piping being cleared, the name of the person receiving the clearance and the date issued;
- 6.2.5 The Supervisor or Lead Personnel shall decide what items will require a hold order tag to insure that the equipment, machinery and/or piping can be safely isolated. This information shall be recorded on the clearance sheet. The clearance sheet shall include the date, the hold order number, the name of the person receiving the clearance, his or her division, and a brief description of the work to be performed;
- 6.2.6 If the Supervisor or Lead Personnel shall determine if additional clearance sheets are required for a single clearance, such as during an outage, the Supervisor or Lead Personnel shall use additional clearance sheet(s) and denote the additional

page numbers in the upper right-hand corner. All additional clearance sheets shall be attached to and shall contain the same heading information as listed on the original clearance sheet;

- 6.2.7 The Supervisor or Lead Personnel shall prepare the hold order tag(s). The hold order tags shall include the following information:
- a) Hold order number;
 - b) Date;
 - c) Time;
 - d) Equipment, machinery and/or piping held;
 - e) Item to which the tag is to be attached to; and,
 - f) Name of the person receiving the clearance.
- 6.2.8 Hold order tags shall be laminated if necessary and attached to control points with single-use nylon cable ties only;
- 6.2.9 The Supervisor or Lead Personnel shall contact affected operations personnel when the hold order tags are ready to be placed. The operations personnel shall record such in the operations log book including the time and name of equipment, machinery and/or piping being cleared;
- 6.2.10 The Lead operations personnel shall then contact an authorized personnel who SHALL sign their name on the back of each hold order tag, clear the equipment, then attach the tag(s).
- 6.2.11 AUTHORIZED personnel include ONLY Brunswick County employees trained to perform duties associated with this program. For example; Director, or designee, Superintendent, Operator, Supervisor, Lead Instrumentation & Electrical Personnel, or Lead Maintenance Personnel.
- 6.2.12 All Department personnel and contractor personnel NOT TRAINED ARE NOT AUTHORIZED to place or remove hold order tags;
- 6.2.13 The authorized personnel, after signing each hold order tag thus clearing the equipment, machinery and/or piping and attaching the hold order tags, shall sign his or her name, including the time and date, on the clearance sheet;
- 6.2.14 In applying a clearance, hold order tags SHALL always be attached to the main points of control first;

- 6.2.15 The clearance holder requesting the clearance must be familiar with the equipment, machinery and/or piping being cleared and BEFORE THE WORK BEGINS, the clearance holder SHALL PERSONALLY verify the placement of the hold order tags and the protection provided prior to accepting the clearance;
- 6.2.16 After the clearance is in place, the Supervisor or Lead Personnel SHALL personally verify the placement of hold order tags. At that time if the Supervisor and/or Lead Personnel and the clearance holder are satisfied with the clearance protection, the Supervisor or the Lead Personnel SHALL issue the clearance by signing his/her name, title, time and date on the clearance sheet;
- 6.2.17 In the event the clearance holder is not satisfied with the protection provided by the clearance the clearance holder may request additional protection from the Supervisor and/or Lead Personnel;
- 6.2.18 The clearance holder is solely responsible for ensuring that grounding straps, where necessary, are properly placed, and removed upon completion of the clearance work. The clearance holder shall insure that the number of grounding straps placed and removed is indicated on the clearance sheet and are tagged with the tag number;

NOTE: Only qualified Instrumentation & Electrical Personnel shall place or remove grounding straps.

- 6.2.19 The clearance holder accepts the clearance by signing his or her name, time and date on the clearance sheet. ONLY legal signatures shall be acceptable, initials or nicknames are NOT acceptable on clearance sheets;
- 6.2.20 Other employees may sign on a clearance holder's clearance only if their names are listed on the official clearance list. All authorized personnel desiring to sign on an established clearance SHALL first verify their safety by checking the clearance protection during a walk-down of the hold order tags. Where necessary, such personnel may need assistance from Operations personnel to verify the safety of the clearance.

IMPORTANT - ALL PERSONS THAT ACCEPT A CLEARANCE SHALL PERSONALLY CHECK HOLD ORDER TAGS AND/OR LOCKS TO INSURE THAT THEIR PROTECTION IS ADEQUATE.

6.3 Issuing a Clearance - TAGS AND LOCKS:

- 6.3.1 An authorized clearance holder (personnel authorized to receive a clearance) shall request a clearance from ONLY the Supervisor or Lead Personnel. The request shall be made as far ahead of the date needed as possible;

6.3.2 Authorized clearance holders requesting a clearance MAY ALSO REQUEST LOCKOUT DEVICES. The locks and lockout hasps or other lockout devices shall be placed on the main points of control such as circuit breakers, power disconnects, main steam and water supply valves, etc.. Locks and lockout hasps may also be used with chains where necessary to lockout valves, etc.

6.3.3 A Clearance Holder, requesting lockout devices, SHALL be responsible for:

- a) Attaching a means of personal identification to each lockout device placed;
- b) Placing lockout devices on controls or other mechanisms.

**The method of identifying personnel applying lockout devices shall consist of attaching a laminated tag which lists the following wording "Lockout Device Applied by: _____" and containing personnel signature. A computer can be used to print on plain paper the wording "Lockout Device Applied: _____" prior to signature, lamination and placement of the tag with lockout devices.*

6.3.4 The Supervisor or Lead Personnel shall determine if the equipment, machinery and/or piping in question can be cleared for tagging and/or locking;

6.3.5 The Supervisor or Lead Personnel shall issue to the clearance holder lock(s), lockout hasps or other lockout devices, and only one (1) key to each lock. Lockout devices are NOT to be used to isolate equipment without a clearance.

NOTE: Only locks shall be attached to lockout hasps. Hold order tags SHALL NOT be attached to lockout hasps. Hold order tags SHALL ONLY be attached to the equipment or control mechanism.

6.3.6 Where equipment, machinery and/or piping can be cleared for tagging (and locking when requested), the Supervisor or Lead Personnel shall obtain a hold order number from the clearance logbook. This number shall be the next in sequence to the previous hold order number issued;

6.3.7 The Supervisor or Lead Personnel shall record in the clearance log book the hold order number, the equipment, machinery and/or piping being cleared, the name of the person receiving the clearance, and the date and time of the issue;

6.3.8 The Supervisor or Lead Personnel shall determine the equipment, machinery and/or piping that will require lockout and tagout to ensure that the equipment, machinery and/or piping being cleared is safe to work on. This information shall be recorded on the clearance sheet. The clearance sheet shall contain the date and time, the hold order number, the name of the person requesting the clearance,

their division, a brief description of the work to be performed and the number of locks issued;

- 6.3.9 If the Supervisor or Lead Personnel determine that multiple clearance sheets are required for a single clearance, such as during an outage, the Supervisor or Lead Personnel shall use additional clearance sheet(s) and denote the additional page numbers in the upper right-hand corner. All related clearance sheets used shall be attached to, and contain the same heading information as the initial clearance sheet;
- 6.3.10 The Supervisor or Lead Personnel shall prepare the hold order tags. The hold order tags shall include the following information:
- a) Hold order number;
 - b) Date;
 - c) Time;
 - d) Equipment, machinery and/or piping held;
 - e) Item to which the tag is to be attached to; and,
 - f) Name of the person receiving the clearance.
- 6.3.11 Hold order tags shall be laminated if necessary to protect the tag from steam, rain and humidity, etc.. Hold order tags shall be attached to control points with single-use nylon cable ties only;
- 6.3.12 The Supervisor or Lead Personnel shall contact affected operations personnel when the hold order tags are ready to be placed. The operations personnel shall record such in the operations log book including the time and name of equipment, machinery and/or piping being cleared;
- 6.3.13 The Lead operations personnel shall then contact an authorized personnel who SHALL sign their name on the back of each hold order tag, clear the equipment, then attach the tag(s).
- 6.3.14 AUTHORIZED personnel include ONLY Brunswick County employees trained to perform duties associated with this program. For example; Director, or designee, Superintendent, Operator, Supervisor, Lead Instrumentation & Electrical Personnel, or Lead Maintenance Personnel.

**All Department personnel and contractor personnel NOT TRAINED
ARE NOT AUTHORIZED to place or remove hold order tags;**

- 6.3.15 The authorized personnel, after signing each hold order tag clearing the equipment, machinery and/or piping and attaching the hold order tags, shall sign his or her name, including the date and time on the clearance sheet;
- 6.3.16 In applying a clearance, hold order tags and lockout devices SHALL always be attached to the main points of control first;
- 6.3.17 The personnel requesting the clearance must be familiar with the equipment, machinery and/or piping being cleared and when possible should contact the County the personnel placing the hold order tags.
- 6.3.18 If unable to contact the County personnel during tag placement, BEFORE THE WORK BEGINS, the clearance holder SHALL personally verify the placement of hold order tags and the protection provided prior to accepting the clearance;
- 6.3.19 If the clearance holder is not satisfied with the protection provided, he or she may request additional protection from the Supervisor.
- 6.3.20 After the clearance is in place and the Supervisor or Lead Personnel and the clearance holder are satisfied that adequate protection is provided, the Supervisor or Lead Person shall issue the clearance by signing on the clearance sheet, his or her name, title, time and date;
- 6.3.21 The clearance holder accepts the clearance by signing his or her name, time and date on the clearance sheet. ONLY legal signatures shall be acceptable, initials or nicknames are NOT acceptable on clearance sheets;
- 6.3.22 Other employees may sign on a clearance holder's clearance only if their names are listed on the official clearance list. All authorized personnel desiring to sign on an established clearance SHALL first verify their safety by checking the clearance protection during a walk-down of the hold order tags. Where necessary, such personnel may need assistance from Operations personnel to verify the safety of the clearance.

**IMPORTANT - ALL PERSONS THAT ACCEPT A CLEARANCE
SHALL PERSONALLY CHECK HOLD ORDER TAGS AND/OR LOCKS
TO INSURE THAT THEIR PROTECTION IS ADEQUATE.**

6.4 Releasing a Clearance

- 6.4.1 The clearance holder SHALL, when clearance work has been completed, insure that all lockout devices applied by him or her, or under his or her control, have

been removed and that all personnel are free and clear of equipment, machinery and/or piping;

- 6.4.2 The clearance holder shall notify the Supervisor or Lead Personnel of the job completion and the status of additional installations or any changes that may have been made;
- 6.4.3 The clearance holder shall return all locks or other lockout devices issued to him or her to the Supervisor or Lead Personnel. The Supervisor or Lead Personnel shall account for all lockout devices before releasing a clearance;
- 6.4.4 The clearance holder shall sign off the clearance sheet, in the spaces provided, thereby releasing his or her portion of the clearance and by that time shall have removed his or her lock(s);
- 6.4.5 When all clearance holders have signed off the clearance sheet, the Supervisor or Lead Personnel shall close the clearance and order all hold order tags to be removed.
- 6.4.6 The authorized personnel removing the hold order tags shall inspect the equipment, machinery and/or piping for hazardous and abnormal conditions before the equipment, machinery and/or piping is operated.
- 6.4.7 Hold order tags shall be removed in reverse order as originally installed. Again, the tags on the main point(s) of control shall be the last to be removed to insure that the equipment, machinery and/or piping can not be energized or operated;
- 6.4.8 After all hold order tags and locks have been removed and returned to the Supervisor or Lead Personnel, the personnel removing the tags shall sign the clearance sheet. The personnel shall sign his or her name, the number of tags removed, the time and date.

6.5 Testing Equipment Under a Clearance

Clearances are applied to encircle equipment with a line of protection. However, there are instances when tests must be performed on equipment that is under a clearance. This type of testing SHALL only be accomplished when a single clearance is in place. Where multiple clearances are present, the clearances MUST be reduced to a single clearance and to a single clearance holder. The following procedures shall be followed for testing equipment under a clearance:

- 6.5.1 The clearance holder shall notify the Supervisor or Lead Personnel that a test is required on the affected equipment, machinery and/or piping;

- 6.5.2 The clearance shall be released by the clearance holder before any operation of the affected equipment, machinery and/or piping are performed. If locks and hasps have been placed they must be removed by the clearance holder only;
- 6.5.3 The Supervisor or Lead Personnel shall order the hold order tags to be removed from the equipment, machinery and/or piping;
- 6.5.4 After the single clearance has been released, the test shall then be performed on the equipment, machinery and/or piping;
- 6.5.5 If additional work is required, the clearance must be reissued or a new clearance issued prior to work being resumed. The clearance holder(s) shall accept the reissued clearance only after rechecking the protection. In cases of reissued clearances, the same hold order tags and/or locks may be used, if legible.

6.6 Failure to Release a Clearance

There may be instances where a clearance holder fails to release a clearance due to an emergency, sickness, injury, etc.. Should this occur the following procedures shall be followed:

- 6.6.1 Supervisor or Lead Personnel shall attempt to contact the clearance holder and request that they return to work and sign off the clearance;
- 6.6.2 If this is not possible, that person's Supervisor or Lead Personnel shall be responsible for assuring that the clearance can be closed and the equipment, machinery and/or piping is safely returned to normal operation;
- 6.6.3 The person's Supervisor or Lead Personnel SHALL be so authorized to release the clearance for the now absent clearance holder;
- 6.6.4 If contact is NOT made with the clearance holder, upon his or her return to work the Supervisor or Lead Personnel shall immediately inform the clearance holder that the clearance was closed by his or her Supervisor or Lead Personnel.

6.7 Filing Clearance Sheets and Hold Order Tag Disposal

The following procedures are to be followed after a clearance has been closed:

- 6.7.1 The Supervisor or Lead Personnel shall remove all copies of the closed clearance sheet(s) from the clearance notebook and staple them together;
- 6.7.2 The closed clearance sheets will then be filed in sequential order in the inactive or completed clearance file for future reference. This file shall be maintained for two (2) years with the Supervisor or Lead Personnel;

6.7.3 The Supervisor or Lead Personnel shall be responsible for destroying all used hold order tags;

6.7.4 The Supervisor or Lead Personnel shall ensure that all locks, keys, hasps and other lockout devices are properly removed.

7. Clearance Sheet

The clearance sheet is used to record all relevant information about the clearance issued and shall include, but not limited to, the following information:

7.1 **FACILITY** - Enter the name of the facility (i.e., Northwest Water Treatment Facility, Booster Pumping Station No. 6, Courthouse Building, etc.);

7.2 **EQUIPMENT HELD** - Enter the name of the equipment, machinery and/or piping being cleared (i.e., No. 1 High Service Motor, Suction Valve and Discharge Valve);

7.3 **REQUESTED BY** - Enter the name of personnel requesting the clearance;

7.4 **DESCRIPTION OF WORK TO BE PERFORMED** - Enter a brief description of the work to be performed on the cleared equipment, machinery and/or piping (i.e., replace C12 Pressure Regulator etc.);

7.5 **PAGE ___ OF ___** - Enter the number of pages related to the original clearance sheet (i.e., Page 1 of 2, Page 2 of 2, etc.) Staple all related clearance sheets together;

7.6 **HOLD ORDER NUMBER (HON)** - Enter the successive hold order number obtained from the clearance log book;

7.7 **DATE** - Enter the date the clearance is to be effective;

7.8 **TAGS ATTACHED TO** - Enter a brief description of where the hold order tags will be placed such as valves, power disconnects, vents, or other control devices; and the device position (opened, closed). Hold order tags (HOT) are to be listed in sequence as to the order in which the equipment is cleared;

7.9 **LOCK NUMBER** - Enter number of locks that have been issued with the clearance and associated with the clearance tag. The numbers will be written on the locks. Enter lock

numbers under the correct craft or division (i.e., instrumentation & electrical or Field Operations), while the other space is to be used for contractors;

- 7.10 **TAGGED BY, NO. OF TAGS, TIME, DATE** - The personnel placing the hold order tags (HOT) after the clearance has been released will sign his or her name, enter the number of tags removed, the time and date the tags were removed;
- 7.11 **REMOVED BY, NO. OF TAGS, TIME, DATE** - The personnel removing the hold order tags (HOT) after the clearance has been released will sign his or her name, enter the number of tags removed, the time and date the tags were removed;
- 7.12 **ISSUING SUPERVISOR OR LEAD PERSONNEL, TIME, DATE** - The Supervisor or Lead Personnel preparing the clearance, after ensuring that the protection is adequate for the clearance holder(s), shall sign his or her name, time and date of the clearance;
- 7.13 **CLOSING SUPERVISOR OR LEAD PERSONNEL, TIME, DATE** - The Supervisor or Lead Personnel closing the clearance shall sign his or her name, and the time and date the clearance was closed;
- 7.14 **CLEARANCE ACCEPTED BY, TIME, DATE** - The person(s) accepting the clearance shall sign his or her name(s), division, time and date. The signature of this person(s) indicates that they have verified hold order tag (HOT) placement and agree that the clearance provides adequate protection;
- 7.15 **CLEARANCE RELEASED BY, TIME, DATE** - The personnel holding the clearance shall sign his or her name, division, time, and date to indicate that a clearance is no longer required.

NOTE: The Supervisor or Lead Personnel shall not close a clearance until all personnel that accepted the clearance have released the clearance;

NOTE: On the clearance sheet places are provided for acceptance of the clearance. If additional personnel wish to be on the clearance, the Supervisor or Lead Personnel shall use additional clearance sheet(s) which contain the same heading information as the original clearance sheet. All related clearance sheets shall be stapled together.

- 7.16 **NUMBER OF GROUNDS PLACED** - Enter the number of grounding straps that have been placed on the affected equipment, machinery and/or piping;
- 7.17 **NUMBER OF GROUNDS REMOVED** - Enter the number of ground straps that were moved or removed. This number should be the same as the number of grounds placed;

- 7.18 **GROUND REMOVED BY** - The person who removed all ground straps shall sign here;
- 7.19 **NUMBER OF LOCKS PLACED** - Enter the number of locks that were issued and placed;
- 7.20 **NUMBER OF LOCKS REMOVED** - Enter the number of locks that were removed and returned to the Supervisor or Lead Personnel;
- 7.21 **INITIALS** - The person placing or removing the locks will enter initials here, but not on the clearance.

Sample Energy Control Procedures are included in Appendix Page 206

LOCKOUT / TAGOUT PROCEDURE Minor Maintenance & Repair of Equipment

These requirements cover the maintenance of equipment where the unexpected energization, start-up, or release of stored energy could cause injury to employees.

The purpose of this procedure is to establish the minimum requirements for the lockout / tagout of hazardous energy isolating devices to prevent the unexpected energization or start-up of equipment or release of stored energy.

Employees shall be authorized by their manager to implement lockout / tagout procedures. They shall have received training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available, and the methods and means necessary for energy isolation and control.

Before working on any equipment, the employee responsible for service or maintenance shall complete this procedure and identify, isolate, and lockout all hazardous energies with standardized, single purpose locks having individual keys. The locks shall be accompanied by a "DANGER - DO NOT OPERATE" tag. A tag alone is permitted only when the equipment is incapable of being locked out.

REMOVAL OF EQUIPMENT FROM SERVICE

(Check and initial as provided when complete)

Equipment Location and Type _____

Reason for Lockout / Tagout _____

Individual Authorizing Lockout _____

Date Authorized _____ Estimated Duration Lock out _____

- _____ A) Notification of AFFECTED EMPLOYEES: Notify all affected employees that machine/equipment is going to be locked out/tagged out.
- _____ B) Application of Controls
- _____ 1) Preparation of Shutdown: Locate and identify all hazardous energy sources and the associated energy isolating devices. Questionable situations shall be resolved with your supervisor before proceeding.
- _____ 2) Equipment Shutdown: If the equipment is in operation, shut it down orderly by the normal stopping procedure.
- _____ 3) Equipment Isolation: Operate the energy isolating devices so the equipment is isolated from all hazardous energy sources.
- _____ 4) Lockout / Tagout Device Application: Lockout / Tagout the energy isolating devices. List the number of devices.

Electrical	Hydraulic	Pneumatic
Mechanical	Flywheels	Springs
Capacitors	Batteries	Vacuum
Gravity	Static Electricity	
Thermal (Heat or Cold)	Pressurized Pipes	
Chemicals (which may cause thermal or pressure build-up)		
Other		

- _____ 5) Stored Energy Dissipation: All potentially hazardous stored energy shall be relieved, restrained, or otherwise rendered safe.
- _____ 6) Verification of Isolation: Verify that isolation of hazardous energy sources was effective by testing with the appropriate instrumentation. After ensuring that no personnel are exposed, operate the normal operating controls to make certain that the equipment will not start-up or cycle. Return all controls to the neutral or off position after verification. (See separate section on "Lockout / Tagout and Verification Procedures").
- C) Additional Requirements: Additional procedures may be required to ensure the continuity of lockout / tagout protection during the testing or positioning of equipment, shift, or personnel changes, group lockout/tagout procedure on this equipment).

RELEASE FROM LOCKOUT / TAGOUT

- _____ A) Inspection: A physical check of the work area shall be made to ensure that all tools are removed, all shields are properly reinstalled, all interlocks have been restored and the area is clear of hazards and personnel.
- _____ B) Notification of Employees: Notify all affected employees that the equipment is about to be returned to service.
- _____ C) Removal of Lockout / Tagout Devices: The employee who attached the lockout/tagout devices shall remove them.
- _____ D) Operation of Energy Isolating Devices: Operate the energy isolating devices to restore energy to the equipment.

Name of Individual Authorizing Lockout

Date

LOCKOUT REMOVAL NOTICE

Date: _____ Time: _____ AM PM

To: _____
(Name of Employee whose lock is removed)

From: _____
(Name of Supervisor removing lock)

- 1) SAFETY LOCK AND "DO NOT OPERATE TAGS" WERE REMOVED BY ME FROM THE FOLLOWING EQUIPMENT:

- 2) LOCATION:

- 3) FOR THE FOLLOWING REASONS:

(SIGNATURE OF SUPERVISOR OR LEAD PERSONNEL REMOVING LOCK)

Distribution (one copy to each):

____ Employee receiving before next work shift

____ Safety

____ Supervisor or Lead Personnel removing lock

____ Posted at job site where work was in progress

____ Posted where lockout was removed

MATERIALS HANDLING AND STORAGE

OSHA STANDARD 1910.176

Handling and storing materials involve diverse operations such as hoisting tons of steel with a crane; driving a truck loaded with concrete blocks; carrying bags or materials manually; and stacking palletized bricks or other materials such as drums, barrels, kegs, and lumber.

The efficient handling and storing of materials are vital to County operations. In addition to raw materials, these operations provide a continuous flow of parts and assemblies through the workplace and ensure that materials are available when needed. The purpose of this program is to eliminate the improper handling and storing of materials and reduce the risk of employee injury.

1. General

1.1 Use of mechanical equipment

1.1.1 Where mechanical handling equipment is used, sufficient safe clearances shall be allowed for aisles, at loading docks, through doorways and wherever turns or passage must be made. Aisles and passageways shall be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard. Permanent aisles and passageways shall be appropriately marked

1.2 Secure storage

1.2.1 Storage of material shall not create a hazard. Bags, containers, bundles, etc., stored in tiers shall be stacked, blocked, interlocked and limited in height so that they are stable and secure against sliding or collapse

1.3 Housekeeping

1.3.1 Storage areas shall be kept free from accumulation of materials that constitute hazards from tripping, fire, explosion, or pest harborage. Vegetation control will be exercised when necessary.

1.4 Clearance limits

1.4.1 Clearance signs to warn of clearance limits shall be provided.

1.5 Guarding

1.5.1 Covers and/or guard- rails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc

2. Employee Responsibilities

2.1 Every employee of Brunswick County is responsible for conducting himself/herself in accordance with this program. All employees will:

2.1.1 Use two-wheeled trucks, four-wheeled carts, roller conveyors, pallet jacks, or any other material handling equipment in the manner established by supervisors.

2.1.2 Ensure that equipment is properly maintained in good condition and when not, report it immediately.

2.1.3 Provide feedback to managers and supervisors regarding the effectiveness of design changes, new tools or equipment.

2.1.4 Attend training as required and apply the knowledge and skills acquired during training to their jobs, tasks, processes, and work activities.

- 2.1.5 Use proper lifting and material handling techniques as outlined in this program.
- 2.1.6 Limit manual lifting or handling tasks to objects less than 50 pounds.
- 2.1.7 Get assistance whenever manually handling or lifting materials that are 50 pounds or greater.
- 2.1.8 Report injuries within 24 hours of their occurrence.

3. Management Responsibilities

- 3.1 Brunswick County Department Heads and Supervisors will:
 - 3.1.1 Ensure that employees in their areas have received the appropriate training.
 - 3.1.2 Ensure that safe material handling practices and principles are considered daily and when conducting worksite evaluations.
 - 3.1.3 Ensure that recommended controls are implemented and/or used appropriately through active follow-up.
 - 3.1.4 Provide employees with and ensure the proper use of appropriate tools, equipment, parts and materials.
 - 3.1.5 Maintain clear communication with managers and employees.
 - 3.1.6 Make assistance available to employees who manually handle or lift items weighing 50 pounds or greater.

4. Employee Training

- 4.1 Training is intended to enhance the ability of managers, supervisors and employees to recognize work-related material handling risk factors and to understand and apply appropriate control strategies. Training in the recognition and control of these risk factors will be given as follows:
 - 4.1.1 To all new employees during orientation
 - 4.1.2 To all employees assuming a new job assignment requiring manual material handling
 - 4.1.3 When new jobs, tasks, tools, equipment, machinery, workstations or processes are introduced
 - 4.1.4 When high exposure risk factors have been identified

5. Unavoidable Lifts

- 5.1 Mechanical aids should be used to move materials whenever possible, however, some lifting cannot be avoided. In these instances, Brunswick County employees are expected to:
 - 5.1.1 Wear supportive shoes
 - 5.1.2 When possible, push and pull rather than lift and lower
 - 5.1.3 Reduce the size of the material to keep it light, compact and easy to grasp
 - 5.1.4 When possible, have most workplace deliveries placed at hip height
 - 5.1.5 Always keep objects in the comfort zone (between hip and shoulder height)
 - 5.1.6 Keep all loads close to and in front of the body

- 5.1.7 Keep the back aligned while lifting
- 5.1.8 Keep elbows near 90 degrees
- 5.1.9 Check the route for any problems or obstacles such as slippery or cluttered floors

The remainder of this page is left intentionally blank.

OFFICE SAFETY

1. General

- 1.1 It is recommended that the provisions contained in the following office safety checklist be adhered to in an effort to eliminate and/or reduce the incidence of office safety and/housekeeping problems:
- 1.1.1 Maintain good housekeeping at all times. Keep floors clean and dry.
 - 1.1.2 Do not have an extension cord across walking areas of floor.
 - 1.1.3 Approach blind areas cautiously.
 - 1.1.4 Report defective furniture or equipment to your supervisor. Tag items “out of service” when an item is not safe to use.
 - 1.1.5 Know location of emergency exits and keep aisles clear to them.
 - 1.1.6 Operate only those pieces of equipment you are authorized to use.
 - 1.1.7 Use fatigue mats when extensive standing is required.
 - 1.1.8 Keep desk and file drawers closed when not in use.
 - 1.1.9 Do not open file or desk drawers above or behind someone without warning them.
 - 1.1.10 Use only step stools and ladders (do not climb on counters or chairs).
 - 1.1.11 Push chairs up to desk or under counter when not in use.
 - 1.1.12 Do not carry loads, which obstruct your view, which are too heavy or without a prepared place to set them down. Ask a co-worker for assistance when needed.
 - 1.1.13 Report any injury to your supervisor.
 - 1.1.14 Keep objects that can be used as projectiles inside desk drawers.
 - 1.1.15 Do not stack anything closer than eighteen (18) inches from the ceiling.

2. Multi-Story Office Buildings

- 2.1 If your office location has interior stairs to access multi-stories, the North Carolina Fire Safety Code has set up guidelines to protect people in buildings with 4 or more stories. Brunswick County will adhere to the following guidelines with respect to multi-story buildings;
- 2.1.1 The doors of the stairwell being locked from the stair side. Section 1008.1.8.7 of the fire code states where a stairwell serves less than 4 stories, stairwell doors are allowed to be locked on the side opposite the egress side, provided that the door is operable on the egress side. This allows the doors to be locked on the stairwell side as long as the doors are available for full instant use from the office area.
 - 2.1.2 The doors of the stairwells should not be propped open; these doors have to offer at a minimum of a smoke barrier between the floor and the stairwell. Propping the door open this may allow fire and smoke to spread between floors. The stairwell

has to be enclosed to allow a safe haven to allow occupants from the upper stories to safely exit the building.

NOTE: Both of these items could hamper fire fighting operations, however, where buildings are fully sprinkled, this provides the highest level of safety available. Where necessary, County buildings are equipped with a Knox Box, which allows the firefighters to get a key that will unlock all the doors in the building. The building manager may elect to add multiple keys in the Knox Box so that fire fighting crews can go into stairwells simultaneously.

3. Portable Space Heaters in Offices

- 3.1 It is recommended that use and type of portable space heaters be approved by Operation Services. In the event a portable space heaters is approved; they must unplugged when you exit the building and at the end of each workday. Never leave the unit on when you are out of the office. An approved heater must have the following:
 - 3.1.1 Automatic safety switch that turns off the unit if it is tipped over
 - 3.1.2 Label or tag indicating test and approval by a recognized independent testing lab
 - 3.1.3 Non-frayed, non-worn, non-cracked, and non-broken cord
 - 3.1.4 Plug that is directly plugged into outlet and not an extension cord.
 - 3.1.5 At least three (3) feet of distance from paper, wood desks, or anything that might burn
 - 3.1.6 Location that is not near wet areas or in high traffic areas such as exit ways

PERSONAL PROTECTIVE EQUIPMENT PROGRAM

The purpose of the Brunswick County Personal Protective Equipment Program is to provide employees with appropriate protection from identified workplace hazards.

At the request of the department head or supervisor, the risk manager and /or the Safety Review Team will perform job/site hazard assessments to determine potential workplace hazards. (See attached assessments guidelines, Appendix I, 29 CFR 1910.132) Once hazards are identified, personal protective equipment is recommended. Department Directors will ensure all affected employees are furnished with and trained on the use and care of their equipment.

Once issued to employees, protective equipment i.e., glasses, goggles, shields, gloves, respirators and/or shoes become a job requirement. An employee with a health/medical condition that prohibits that employee from wearing protective equipment for an extended period of time will furnish a doctor's note stating the condition and limitation. Any employee with a health/medical condition that requires additional equipment must provide supporting medical documents.

Annually, Brunswick County will provide a minimum stipend of eighty five dollars (\$85.00), toward the purchase of required safety shoes for employees required to wear protective footwear. The Department Director reserves the right to increase or decrease depending on certain factors; such as job hazard analysis or reasonable cost of protective equipment. SEE SAFETY SHOE PROGRAM SECTION OF THIS MANUAL. Prescription safety glasses will be covered and obtained as outlined in the state contract 345B for safety spectacles. For the approval of prescription safety eyewear, a job hazard analysis must be performed prior to purchase. For employees are subject to the respiratory protection program; a physical exam will be required by a County appointed medical provider. Disposable safety equipment will be given periodically as needed at no cost to the employee.

All personal protective equipment must meet the applicable OSHA standards.

RECORDKEEPING AND REPORTING INJURIES ***OSHA STANDARD 1910.1904***

OSHA 29 CFR Part 1910.1904 requires the recording and posting of employee injuries on prescribed forms. Posting of the Summary of Injuries and Illnesses shall be from February 1 until March 30 for incidents from the prior calendar year. This summary is available for review in each Department located at commonly frequented areas such as breakrooms or workrooms. Copies are available for employees upon request from Risk Manager.

RESPIRATORY PROTECTION PROGRAM ***OSHA STANDARD 1910.1904***

In the Respiratory Protection program, hazard assessment and selection of proper respiratory PPE are conducted in the same manner as for other types of PPE. In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used. References: OSHA Standards *Respiratory Protection* (29 CFR 1910.134)

All Employees shall follow the requirements of the Respiratory Protection Program.

1. Department Head

- 1.1 implement the requirements of this program;
- 1.2 provide a selection of respirators as required;
- 1.3 enforce all provisions of this program; and
- 1.4 appoint an individual to administer the respiratory protection program.

2. Program Administrator/Supervisor

- 2.1 review sanitation/storage procedures;
- 2.2 ensure respirators are properly stored, inspected and maintained;
- 2.3 monitor compliance for this program;
- 2.4 provide training for affected Employees;
- 2.5 review compliance and ensure monthly inspection of all respirators; and
- 2.6 schedule respirator fit testing.

3. Designated Occupational Health Care Provider

- 3.1 Emergency Services conducts all fit tests and the Health Department provides support on the medical aspects of program.

4. Program Administrator /Supervisor

- 4.1 Supervisors are designated as the program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.

5. Voluntary Use of Respirators

- 5.1 OSHA requires that the voluntary use of respirators (i.e., when respirators are not required by the County), be controlled as strictly as if their use were required. So, any employee wearing a respirator voluntarily shall fall under this respiratory protection program, be issued a copy of Appendix D of 1910.134, and fill out a medical questionnaire (Appendix C) and have it evaluated by an appropriate individual. Training will be conducted on the proper storage, cleaning, and maintenance of the respirator. All steps will be taken to ensure that the respirator does not pose a health risk to the person donning it. Exception: Employees whose only use of respirators involves the voluntary use of filtering (non-sealing) face pieces (dust masks, with one OR two straps) do not fall under this program.

6. Program Evaluation

- 6.1 Evaluations of the workplace are necessary to ensure that the written respiratory protection program is being properly implemented. This includes consulting with employees to ensure that they are using the respirators properly. Evaluations shall be conducted as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

- 6.2 Program evaluation will include discussions with employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:
- 6.2.1 Respirator fit (including the ability to use the respirator without interfering with effective workplace performance. Emergency Services and Brunswick County Health and Human Services provide support);
 - 6.2.2 Appropriate respirator selection for the hazards to which the employee is exposed;
 - 6.2.3 Proper respirator use under the workplace conditions the employee encounters; and
 - 6.2.4 Proper respirator maintenance.

7. Record Keeping

- 7.1 Brunswick County Administration will retain written information regarding medical evaluations, fit testing, and the respirator program. This information will facilitate employee involvement in the respirator program, assist the County in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.

8. Training and Information

- 8.1 Departments where respirators are needed will schedule effective training for employees who are required to use respirators. The training must be comprehensive, understandable, recur annually, and more often if necessary. Training will be provided prior to requiring the employee to use a respirator in the workplace. The training shall ensure that each employee can demonstrate knowledge of at least the following:
- 8.1.1 Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
 - 8.1.2 Limitations and capabilities of the respirator;
 - 8.1.3 How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;
 - 8.1.4 How to inspect, put on and remove, use, and check the seals of the respirator;
 - 8.1.5 What the procedures are for maintenance and storage of the respirator;
 - 8.1.6 Limitations of the effective use of respirators; and
 - 8.1.7 The general requirements of this program.
- 8.2 Retraining shall be conducted annually and when:
- 8.2.1 changes in the workplace or the type of respirator render previous training obsolete;
 - 8.2.2 inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; and

- 8.2.3 other situation arises in which retraining appears necessary to ensure safe respirator use.

9. Classroom Instruction

- 9.1 Training will be conducted by instructors who have adequate knowledge of OSHA training requirements. Training is divided into the following sections:
 - 9.1.1 Overview of the County Respiratory Protection Program & OSHA Standard;
 - 9.1.2 Respiratory Protection Safety Procedures;
 - 9.1.3 Respirator Selection;
 - 9.1.4 Respirator Operation and Use;
 - 9.1.5 Why the respirator is necessary;
 - 9.1.6 How improper fit, usage, or maintenance can compromise the protective effect;
 - 9.1.7 Limitations and capabilities of the respirator;
 - 9.1.8 How to use the respirator effectively in emergency situations, including respirator malfunctions;
 - 9.1.9 How to inspect, put on and remove, use, and check the seals of the respirator;
 - 9.1.10 What the procedures are for maintenance and storage of the respirator;
 - 9.1.11 Limitation of the effective use of respirators; and
 - 9.1.12 Change out schedule and procedure for air purifying respirators (APR).

10. Fit Testing

- 10.1 Emergency Services will provide qualitative and quantitative fit testing for each type and model of respirator used.
- 10.2 Additional fit tests will be conducted whenever the employee reports, or the County, Physician, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
- 10.3 If after passing a QLFT or QNFT, the employee notifies the County, program administrator, supervisor, or Physician that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator face piece and to be retested.

11. Hands-on respirator Training

- 11.1 Hands-on respirator training will ensure that each employee can demonstrate a knowledge of the following:
 - 11.1.1 Respirator Inspections;
 - 11.1.2 Respirator cleaning and sanitizing;
 - 11.1.3 Record Keeping;
 - 11.1.4 Respirator Storage;
 - 11.1.5 Respirator Fit Check; and
 - 11.1.6 Emergencies.

12. Basic Respiratory Protection Safety Procedures

- 12.1 Only authorized and trained Employees may use Respirators. Those Employees may use only the Respirator that they have been trained on and properly fitted to use.
- 12.2 Only Physically Qualified Employees may be trained and authorized to use Respirators. A pre-authorization and certification by a qualified physician will be required and maintained. Any changes in an Employees health or physical characteristics will be reported to the program administrator and will be evaluated by a qualified physician.
- 12.3 Only the proper prescribed respirator or SCBA may be used for the job or work environment. Air-purifying respirators may be worn in work environments when oxygen levels are 19.5 percent to 23.5 percent and when the appropriate cartridge, (as determined by the manufacturer and approved by NIOSH), for the known hazardous substance is used. SCBAs will be worn in oxygen deficient and oxygen rich environments (below 19.5 percent or above 23.5 percent oxygen).
- 12.4 Employees working in environments where a sudden release of a hazardous substance is likely will wear an appropriate respirator for that hazardous substance (example: Employees working in an ammonia compressor room will have an ammonia APR respirator on their person).
- 12.5 Only SCBAs will be used in oxygen deficient environments, environments with an unknown hazardous substance or unknown quantity of a known hazardous substance, or any environment that is determined "Immediately Dangerous to Life or Health" (IDLH).
- 12.6 Employees with respirators loaned on "permanent check out" will be responsible for the sanitation, proper storage and security. Respirators damaged by normal wear will be repaired or replaced by the County when returned.
- 12.7 The last Employee using a respirator and/or SCBA that is available for general use will be responsible for proper storage and sanitation. Monthly and after each use, all respirators will be inspected with documentation to assure its availability for use.

- 12.8 All respirators will be located in a clean, convenient and sanitary location.
- 12.9 In the event that Employees must enter a confined space; work in environments with hazardous substances that would be dangerous to life or health should an RPE (Respiratory Protection Equipment) fail (a SCBA is required in this environment); and/or conduct a HAZMAT entry, a "buddy system" detail will be used with a Safety Watchman with constant voice, visual or signal line communication. Employees will follow the established Emergency Response Program and/or Confined Space Entry Program when applicable.
- 12.10 Management will establish and maintain surveillance of jobs and work place conditions and degree of Employee exposure or stress to maintain the proper procedures and to provide the necessary RPE.
- 12.11 Management will establish and maintain safe operation procedures for the safe use of RPE with strict enforcement and disciplinary action for failure to follow all general and specific safety rules. Standard Operation Procedures for General RPE use will be maintained as an attachment to the Respiratory Protection Program and Standard Operation Procedures for RPE use under emergency response situations will be maintained as an attachment to the Emergency Response Program.

13. Selection of Respirators

- 13.1 The County has evaluated the respiratory hazard(s) in each workplace, identified relevant workplace and user factors and has based respirator selection on these factors. This selection has included appropriate protective respirators for use in IDLH atmospheres, and has limited the selection and use of air-purifying respirators. All selected respirators are NIOSH certified.

Each department should have potential exposures listed in MSDS book; air contaminants, estimates of exposure and respirators to be used with those contaminants in this section.

14. Physical and Medical Qualifications

- 14.1 Records of medical evaluations must be retained and made available in accordance with 29 CFR 1910.1020.

15. Medical Evaluations

- 15.1 Required Evaluations
 - 15.1.1 Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. The County provides a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace.
- 15.2 Medical Evaluation Procedures

- 15.2.1 The employee will be provided a medical questionnaire by the designated Occupational Health Care Provider.
- 15.3 Follow-up Medical Examinations
- 15.3.1 The County shall ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions in Part B of the questionnaire or whose initial medical examination demonstrates the need for a follow-up medical examination. The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the Physician deems necessary to make a final determination.
- 15.4 Administration of the Medical questionnaire and examinations
- 15.4.1 The medical questionnaire and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content. The County shall provide the employee with an opportunity to discuss the questionnaire and examination results with the Physician.
- 15.5 Supplemental Information for the Physician
- 15.5.1 The following information must be provided to the Physician before the Physician makes a recommendation concerning an employee's ability to use a respirator
- a) The type and weight of the respirator to be used by the employee;
 - b) The duration and frequency of respirator use (including use for rescue and escape);
 - c) The expected physical work effort;
 - d) Additional protective clothing and equipment to be worn;
 - e) Temperature and humidity extremes that may be encountered; and
 - f) Any supplemental information provided previously to the Physician regarding an employee need not be provided for a subsequent medical evaluation if the information and the Physician remain the same.
- 15.6 Medical determination
- 15.6.1 In determining the employee's ability to use a respirator, the County shall obtain a written recommendation regarding the employee's ability to use the respirator from the Physician. The recommendation shall provide only the following information:
- a) Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;
 - b) The need, if any, for follow-up medical evaluations;

- c) A statement that the Physician has provided the employee with a copy of the Physician's written recommendation; and
- d) If the respirator is a negative pressure respirator and the Physician finds a medical condition that may place the employee's health at increased risk if the respirator is used, the County shall provide an annual physical report (APR) if the Physician's medical evaluation finds that the employee can use such a respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the County is no longer required to provide an APR
- e) A change occurs in workplace conditions (physical work effort, protective clothing, temperature, etc.) that may result in a substantial increase in the physiological burden placed on an employee.

16. Respirator Procedures for IDLH Atmospheres

- 16.1 For all IDLH atmospheres, the County shall ensure that:
 - 16.1.1 One employee or, when needed, more than one employee is located outside the IDLH atmosphere;
 - 16.1.2 Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;
 - 16.1.3 The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;
 - 16.1.4 The Director or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue; and
 - 16.1.5 The Director or designee authorized to do so by the County, once notified, provides necessary assistance appropriate to the situation.
- 16.2 Employee(s) located outside the IDLH atmospheres will be equipped with:
 - 16.2.1 Pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either
 - 16.2.2 Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or
 - 16.2.3 Equivalent means for rescue where retrieval equipment is not required.

17. Respirator Storage

- 17.1 Respirators are to be stored as follows:
 - 17.1.1 All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face piece and exhalation valve.

17.2 Emergency Respirators shall be:

17.2.1 All emergency respirators shall be kept accessible to the work area; stored in compartments or in covers that are clearly marked as containing emergency respirators; and stored in accordance with any applicable manufacturer instructions.

18. Repair of Respirators

18.1 Respirators that fail an inspection or are otherwise found to be defective will be removed from service to be discarded, repaired or adjusted in accordance with the following procedures:

18.1.1 Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;

18.1.2 Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and

18.1.3 Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

19. Breathing Air Quality and Use

19.1 The County shall ensure that compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration accords with the following specifications:

19.1.1 Compressed and liquid oxygen shall meet the United States Pharmacopoeia requirements for medical or breathing oxygen;

19.1.2 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, to include:

- a) Oxygen content (v/v) of 19.5-23.5%;
- b) Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
- c) Carbon monoxide (CO) content of 10 ppm or less;
- d) Carbon dioxide content of 1,000 ppm or less; and
- e) Lack of noticeable odor.

19.1.3 Compressed oxygen will not be used in atmosphere-supplying respirators that have previously used compressed air;

19.1.4 Oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution;

19.1.5 Cylinders used to supply breathing air to respirators meet the following requirements:

- a) Cylinders are tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178);
- b) Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air;
- c) Moisture content in breathing air cylinders does not exceed a dew point of -50 deg.F (-45.6 deg.C) at 1 atmosphere pressure;
- d) Breathing air couplings are incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing air lines; and
- e) Breathing gas containers shall be marked in accordance with the NIOSH respirator certification standard, 42 CFR part 84.

HAZARD IDENTIFICATION, ASSESSMENT AND CONTROL

Hazard identification and elimination is not only an inherent responsibility of supervision in providing a safe workplace for employees, but also requires employee involvement. As such, hazard evaluation and control shall be an ongoing concern for all. It is the responsibility of everyone (management, supervisors and all employees) to identify, report, and correct, all possible hazards. Reports should be made to the Department Director, Supervisor or Risk Manager for appropriate action and follow up.

JOB HAZARD ANALYSIS

It is the responsibility of the department supervisor to request a written Job Hazard Analysis from Risk Management, to identify hazards and to determine the proper engineering controls, safety equipment and Personal Protective Equipment required to minimize the risks of hazardous job tasks.

1. Procedures for a Job Hazard Analysis/Risk Assessment

- 1.1 List the sequence of job steps the job is broken down into basic steps, describing what is to be done in a logical sequence.
- 1.2 Search for and list potential hazards of each step that may cause an injury. The objective is to identify as many hazards as possible.
- 1.3 Decide on a recommended action or procedure to protect the employee from the hazards. When the risks and potential hazards associated with each step are identified and their causes understood then methods of eliminating them should be outlined.

2. Methods of Job Hazard Analysis

- 2.1 There are four basic methods by which this can be accomplished:

- 2.1.1 Substitution - Eliminate the hazardous process or operation and provide a substitute action.
- 2.1.2 Isolation - Isolate the process or operation to eliminate or minimize the hazard.
- 2.1.3 Protection - Provide appropriate engineering controls to minimize or eliminate hazards.
- 2.1.4 Personal Protection- Provide and enforce use of personal protective equipment to reduce the possibility of injury or illness.
- 2.2 The information collected from all of the above steps is used to create specific department safety policies and procedures. The policies and procedures assist supervisors in instructing employees how to perform their job safely.
- 2.3 The Risk Manager can provide tools and assistance in conducting the Job Hazard Analysis.

SAFETY INSPECTIONS

Every employee is responsible for maintaining a safe working environment and reporting unsafe conditions to their supervisor. Self-inspections of work areas and detailed inspections of equipment and review of employee operating procedures should be performed by the supervisor on a regular basis.

1. Safety Inspection Program Objectives

- 1.1 Maintain a safe work environment through awareness training, hazard recognition and hazard control or elimination.
- 1.2 Ensure that employees are following proper safety procedures while working.
- 1.3 Determine which operations meet or fail to meet acceptable safety standards.
- 1.4 Inspections should be documented and all unsafe conditions, procedures, and practices corrected.
- 1.5 Inspection reports will identify the hazard and specify the length of time to correct violations or hazards. Corrective action will be the responsibility of the Department Director.

2. Inspection Procedures and Protocol

- 2.1 In addition to self-inspections, the County Risk Manager, the commercial insurance loss control specialists, local fire department and the Department of Labor (OSHA) may inspect Brunswick County operational activities. If at any time, you are told an inspector is on the property, you must contact your supervisor. Supervisors contact Department Head and Risk Manager in County Administration.

- 2.2 Inspection reports shall be responded to in writing detailing corrective measures to be implemented and date of correction. All supervisors and employees are required to cooperate with these inspection representatives. Copy of responses should be sent to Risk Management. Departments should contact Risk Management for assistance at any time, especially when OSHA Compliance Officers visit in order to receive assistance in responding and avoiding further enforcement action.
- 2.3 New employees will be provided orientation training and will be furnished information and literature covering the County's safety policies, rules, and procedures. Individual job/task training, to include the applicable regulations/standards for their job, will be provided to all employees by their immediate supervisor(s). Included in this training is the hazard recognition, avoidance, and prevention
- 2.4 Training records must be maintained by departments in a master log indicating the name of the employee trained, date of training and an outline of the training topic covered.
- 2.5 Risk Management can provide or arrange training assistance in these areas, upon request.

RECORDKEEPING AND REPORTING INJURIES

OSHA 29 CFR Part 1910.1904 requires the recording and posting of employee injuries on prescribed forms. Posting of the Summary of Injuries and Illnesses shall be from February 1 until March 1 for incidents from the prior calendar year. This summary is available for review in each Department located at commonly frequented areas such as breakrooms or workrooms. Copies are available for each upon request from Risk Manager.

SAFETY SHOES

For the purpose of this program, safety shoes are defined as shoes meeting the foot protection requirements of ANSI Z 41-1991. SEE PERSONAL PROTECTIVE EQUIPMENT section of this manual for program requirements.

Brunswick County occupations requiring foot protection include but are not limited to:

Utility Workers	Equipment Operators I, II	Landfill employees
Landscapers	Park Attendants	Paramedics
Automotive Mechanics	Meter Readers	Building Inspectors
Solid Waste Services	Engineering Inspectors	Construction Workers

Positions requiring uniformed footwear will designated by the Department Head by requesting a job hazard analysis by the safety coordinator of that department or County Risk Manager.

If after a job hazard analysis is performed to determine if a position is required to wear safety shoes, employees may purchase protective footwear. Employees may elect to go to the vendor of their choice and present the receipt along with proof of the shoe's safety characteristics to their supervisor.

In the event shoes become damaged and no longer provide protection due to a task performed, Department Directors may elect to grant an allowance for an additional pair of qualifying shoes in a fiscal year.

Department Directors are required to budget funding of the Safety Shoe Program annually as a "Uniform" item.

INSTRUCTIONS FOR SAFETY SHOE PURCHASE

- Employee must be eligible for shoe allowance through Department Head approval or a job hazard analysis has been completed for that job.
- Brunswick County will provide an annual on-site visit from a shoe vendor in which employees can obtain a pair of safety shoes at an amount previously approved by the department head. Employees will be required to pay any costs incurred over the department head specified amount.
- Employees who purchase shoes outside of the designated vendor visit must submit a receipt to their supervisor in order to get a refund from Brunswick County. Depending on the cost of the safety shoes, a full or partial refund will be made. Employees will be required to pay any costs incurred over the amount designated by the department head.
- Supervisor will sign off on a check request and attach a copy of the receipt to submit to Finance for reimbursement.

SAFETY TRAINING

Supervisors shall ensure all employees under their control are competently trained and capable of carrying out assigned tasks in a safe manner. Training and education cannot be overemphasized as a means of learning a healthful and safe approach to employee work effort. Knowledge of the safety rules and how and when to function under the rules, supplemented by compliance, is essential to safety.

Employees scheduled for any safety and health training will attend such training. Departments are required to hold monthly safety training programs in conjunction with the Brunswick County Annual Safety Training Calendar. (See appendix)

BRUNSWICK COUNTY SAFETY TRAINING CALENDAR

Month	Level I	Level II
	<u>All Departments</u>	<u>Occupation Specific</u>
January	Accident Prevention / Reporting	Accident Prevention / Reporting
February	Global Harmonization Standard	Chemical Safety/SPCC
March	Office Safety	Material Handling
April	Driver Training Forklift Training	Work Zone Safety Pesticide Safety
May	Evacuation & Fire Safety Electrical Safety	Emergency Preparedness LOTO
June	Bloodborne Pathogens	Bloodborne Pathogens SCBA Fit Testing
July	Ergonomics	Personal Protective Equipment
August	Equipment Safety	Global Harmonization Standard/ Lab Safety
September	Hand Tool Safety Walking Working Surfaces	Confined Spaces Machine Guarding
October	Respiratory Training	SCBA Fit Testing LOTO
November	Workplace Safety	Plant Safety Review

Additional Monthly Topics

Fire Safety
Driving/Forklift Training
Food Safety
Facility Inspections

TRENCHING AND EXCAVATION SAFETY POLICY

AS ADOPTED JUNE 2, 2008

A. PURPOSE

To establish minimum requirements for practices and procedures to protect employees from cave-in or earth collapse when working in job sites where trenching, benching, shoring, and/or excavation is needed.

B. APPLICABILITY

This program sets forth the practices required for trenches and excavations with a depth of 4 feet or greater along any portion of its length that will be entered in by employees.

C. POLICY

It is the policy of Brunswick County to comply with North Carolina Occupational Safety and Health Standards for General Industry 29CFR 1926.650 Subpart P. In accordance with the statute Brunswick County has adopted the following Trenching and Excavation Safety Program. All employees working on Brunswick County properties where trenching is performed at a depth of 4 feet or greater, along any portion of its length that will be entered in by employees, shall comply with the procedures of the Trenching and Excavation Safety Program as outlined below. All visitors, vendors, contractors, and non- employees of the County will not be allowed to enter the worksite unless all contractual requirements of the County have been met.

D. PROCEDURES

All work performed in excavations 4 feet or greater in depth shall comply with the procedures of the Trenching and Excavation Safety Program in accordance with the guidelines set forth in the North Carolina Occupational Safety and Health Standards for General Industry 29CFR 1926.650 Subpart P. The following program will be adhered to by Brunswick County employees who perform work in or around an excavation or trenching operation.

1. Scope and Application

1. Brunswick County employees trained as competent persons defined in 29 CFR 1926.650 have the responsibility and authority to halt any unsafe practices not in accordance with this policy.
2. Excavations or trenches 20 feet deep or greater must have a protective system designed by a registered professional engineer.

Responsibilities

1. Supervisors trained as a competent person, described by the North Carolina Occupational Safety and Health Standards for General Industry 29CFR 1926 Subpart P (standard) have the primary responsibility for the implementation of the Trenching and Excavation Safety Program in their work area. The trained supervisor has ultimate responsibility for the safety of the employees and general public affected by the excavation. This includes evaluation of the work to be performed, determination of the means of protection that will be used, and adherence to the provisions of this policy as appropriate. The supervisor must

ensure daily, or more often as required, that site conditions are safe for employees to work in excavations. The supervisor or a member of the work group must be a "competent person" as defined by OSHA.

2. Employees have the primary responsibility for working in accordance with the provisions of this program. No employees should enter an excavation meeting the scope of this policy until authorized by the Competent Person.
3. Departments have the primary responsibility for providing training, trench protection systems, effective barricades, and supporting the use of other protective measures deemed prudent and necessary by the competent person.

This includes:

- On-site evaluation to monitor use of safe work practices and procedures;
- Assisting with atmospheric testing and equipment selection as needed;
- Providing or identifying appropriate training for Competent Persons and staff;
- Providing technical assistance as needed; and,
- Reviewing and updating the program at least annually.

Definitions:

Benching means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.

Cave-in means the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

Competent Person means one who is capable to identify existing and predictable hazards in the surroundings or working conditions that may affect employees and the general public, and who has authority to take prompt corrective measures to eliminate them.

The Competent Person(s):

Must be trained in and knowledgeable of excavation and trenching standards, and other programs that may apply (Hazard Communication, Confined Space, Respiratory Protection).

Must be capable of recognizing hazardous conditions and must have authority to stop work and ensure that hazards are corrected. Performs and documents the 'Daily Excavation Inspection', and knows when inspections must be performed. Must assure that the location of underground installations or utilities have been properly located. Must identify and ensure the use of adequate protective systems, work methods, and personal protective equipment (PPE) on the excavation site.

Excavation means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Registered Professional Engineer (RPE) means a person who is registered as a professional engineer.

Shield (shield system) means a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees with the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Also known as trench boxes or trench shields.

Shoring (shoring system) means a structure such as a metal hydraulic, mechanical, or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.

Sloping (sloping system) means a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline varies with differences in such factors as the soil type, environmental exposure conditions, and application of surcharge loads.

Soil Type A - Most stable: clay, silt 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. As most soils in areas where work will be conducted at UF have been disturbed, no UF soils will be considered Type A.

Soil Type B - Medium stability: silt, sandy loam, medium clay, and unstable dry rock; previously disturbed soils unless otherwise classified as Type C.

Soil Type C - Least stable: gravel, loamy sand, soft clay, submerged soil or dense, heavy unstable rock, and soil from which any water is seeping.

Soil - Mixed Types (Layered Geological Strata) - The soil must be classified on the basis of the soil classification of the weakest soil layer. Each layer may be classified individually if a more stable layer lies below a less stable layer, i.e. where a Type C soil rests on top of stable rock.

Trench (trench excavation) means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less, the excavation is also considered to be a trench.

Excavations must not endanger the underground installations or the employees engaged in the work. Utilities left in place should be protected by barricades, shoring, suspension, or other means as necessary to protect employees.

Protection of the Public: Trenches and excavations must be isolated from public access by a substantial physical barrier. Barricades, lighting, and posting shall be installed as appropriate prior to the start of any trenching or excavation operations. All temporary excavations of this type shall be backfilled as soon as possible.

Guardrails, fences, or barricades should be installed around excavations adjacent to walkways, roads, paths, or other traffic areas. Use of barricade tape alone is not considered a sufficient method of isolation when the excavation is unattended. Warning lights or other illumination shall be used as necessary for the safety of the public at night.

Wells, holes, pits, and similar excavations must be effectively barricaded or covered and posted. Walkways or bridges used by the general public to cross excavations must be equipped with standard guardrails.

Surface Encumbrances: All equipment, materials, supplies, buildings, roadways, trees, utility vaults, boulders, etc. that could present a hazard to employees working in the excavation must be removed or supported as necessary to protect employees.

Soil Classification: The competent person in charge of the excavation shall be responsible for determining the soil type. All previously disturbed soil is automatically considered Type B or C soil. Because most excavations on UF property will be conducted in order to repair / replace existing pipelines or equipment (i.e. the soil has been previously disturbed), **excavations shall be made to meet the requirements for Type B or C soils only**, as appropriate. Soil may be considered Type C by default and no additional tests required.

To classify soil as Type B the competent person shall use a visual test coupled with one or more manual tests.

Visual Test: Evaluate the conditions around the site including the soil adjacent to the site and the soil being excavated.

Identify any signs of vibration. Check for crack-line openings along the failure zone, look for existing utilities that indicate that the soil has been previously disturbed, and observe the open side of the excavation for indications of layered geologic structuring.

Look for signs of bulging, boiling, or sloughing, as well as signs of water seepage from the sides or bottom of the excavation.

The area adjacent to the excavation should be evaluated for foundations or other intrusions into the failure zone, and the evaluator should check the spoil distance from the edge of the excavation.

Any one of the following will cause soil to be classified as Type C:

- Water seepage into excavation.
- Vibration from road traffic or equipment.
- Signs of bulging, boiling, or sloughing.
- Crack lines along failure zone.

Manual Tests:

Thumb Penetration Test: Attempt to press the thumb firmly into the soil in question. If the thumb penetrates no further than the length of the nail, it is probably Type B soil. If the thumb penetrates the full length of the thumb, it is Type C. It should be noted that the thumb penetration test is the least accurate testing method.

Dry Strength Test: Take a sample of dry soil. If it crumbles freely or with moderate pressure into individual grains it is considered granular (Type C). Dry soil that falls into clumps that subsequently break into smaller clumps (and the smaller clumps can only be broken with difficulty) it is probably clay in combination with gravel, sand, or silt (Type B).

Plasticity or Wet Thread Test Take a moist sample of the soil. Mold it into a ball and then attempt to roll it into a thin thread approximately 1/8 inch in diameter by 2 inches in length. If the soil sample does not break when held by one end, it may be considered Type B.

A pocket penetrometer, shear vane, or torvane may also be used to determine the unconfined compression strength of soils.

Protective Systems: In excavations greater than 4 feet in depth a method to protect people entering the excavation from cave-in must be employed. Acceptable protective methods include sloping, benching, shielding, and shoring.

Benching, Sloping, Shoring, and Shielding Requirements

General: Excavations under the base of the footing of a foundation or wall require a support system designed by a registered professional engineer. Sidewalks, pavement, utility vaults or other similar structures shall not be undermined unless a support system or another method of protection is provided to protect employees from their possible collapse. Sloping or benching is often the preferred methods of protection; however, shoring or shielding is used when the location or depth makes sloping to the allowable angle impractical.

Sloping: Maximum allowable slopes for excavations less than 20 feet based on soil type and angle to the horizontal are as follows:

Type B soil must have walls sloped to a maximum angle of 45-degrees (1:1 slope) from horizontal in all directions.

Type C soil, must have walls sloped at a maximum angle of 34-degrees (1:1.5 slope) from horizontal in all directions.

Benching: In Type B soil, the vertical height of the benches must not exceed 4 feet. Benches in increments of 2 feet or less is preferred. The angle developed by the edge of the benches must not exceed the maximum allowable slope for that soil type (Type B soil 45-degrees).

Benching is not permitted in Type C soil.

Shielding: Trench boxes or trench shields are intended to protect workers from cave-ins and similar incidents. The trench shield is lowered into the excavation and workers may then enter the protected area within the shield. Only trench shields designed or certified by a registered professional engineer may be used. The use is limited to those trenches for which the shield is certified (e.g. maximum depth and material). The manufacturer must approve any modifications to the shields. The excavated area between the outside of the trench box and the face of the trench should be as small as possible. The space between the trench box and the excavation side should be backfilled to prevent lateral movement of the box.

Trench boxes may be used in combination with sloping and benching. The box must extend at least 18 inches above the surrounding area if there is sloping toward the excavation. This can be accomplished by providing a benched area adjacent to the box.

Type B Soil 1:1 Type C Soil 1:1.5

Shields may be placed 2 feet above the bottom of an excavation, provided they are calculated to support the full depth of the excavation and there is no caving under or behind the shield.

Workers must enter and leave the shielded area in a protected manner, such as by a ladder or ramp. Workers may not remain in the shielded area while it is being moved.

Shoring: Timber shoring shall not be used by Brunswick County personnel. Hydraulic shoring is permitted as workers do not have to enter the trench to install it. It is gauge-regulated and ensures even distribution of pressure along the trench line and can be adapted to various trench depths and widths. All shoring shall be installed from the top down and removed from the bottom up. Hydraulic shoring shall be checked at least once per shift for leaking hoses and/or

cylinders, broken connections, cracked nipples, bent bases, and any other damaged or defective parts. The top cylinder of hydraulic shoring shall be no more than 18 inches below the top of the excavation. The bottom of the cylinder shall be no higher than 4 feet from the bottom of the excavation. [Two (2) feet of trench wall may be exposed beneath the bottom of the rail or plywood sheeting, if used.]

Three (3) vertical shores, evenly spaced, must be used to form a system. Wales are installed no more than 2 feet from the top, no more than 4 feet from the bottom, and no more than 4 feet apart, vertically.

Inspections: Frequent inspection of the excavation and surrounding area by the Competent Person is critical to ensure the safety of the workers involved in work within the trench. The Competent Person must conduct inspections of the entire excavation site:

- Daily and before the start of each shift.
- As dictated by the work being done in the trench.
- After every rainstorm.
- When fissures, tension cracks, sloughing, undercutting, water seepage, bulging at the bottom, or other similar conditions occur.
- When there is a change in the size, location, or placement of the spoil pile.
- When there is any indication of change or movement in adjacent structures.

Temporary spoil shall be placed no closer than 2 feet from the surface edge of the excavation. The distance is measured from the nearest base of the spoil to the cut. This distance should not be measured from the crown of the spoil deposit. This distance requirement ensures that loose rock or soil from the temporary spoil will not fall on employees in the trench.

The spoil should be placed so that it channels rainwater and other run-off water away from the excavation. Spoil should be placed so that it cannot accidentally run, slide, or fall back into the excavation.

Surface Crossing of Trenches: Surface crossing of trenches should not be made unless absolutely necessary. However, if necessary, they are only permitted under the following conditions:

Vehicle Crossings must be designed by and installed under the supervision of a registered professional engineer.

Walkways or Bridges must have a minimum clear width of 20 inches, be fitted with standard rails, and extend a minimum of 24 inches past the surface edge of the trench.

Ingress and Egress Trenches 4 feet or more in depth shall be provided with ladders or other fixed means of egress. Spacing must be such that a worker will not have to travel more than 25 feet to the nearest means of egress. Ladders must be secured and extend a minimum of 36 inches above the landing. Metal ladders should be used with caution, particularly when electric utilities are present.

Exposure to Vehicles: Employees exposed to vehicular traffic shall be provided with and required to wear reflective vests or other suitable garments marked with or made of reflective or

high-visibility materials. Trained flag persons, signs, signals, and barricades shall be used when necessary.

Exposure to Falling Loads: Employees are not allowed in the excavation while heavy equipment is digging. Employees must not work under loads being lifted or moved by heavy equipment used for digging or lifting. Employees are required to stand away from equipment that is being loaded or unloaded to avoid being struck by falling materials or spillage.

Hazardous Atmospheres and Confined Spaces - Testing for Atmospheric Contaminants

If there is any possibility that the trench or excavation could contain a hazardous atmosphere, atmospheric testing must be conducted prior to entry. Conditions that might warrant atmospheric testing would be if the excavation was made in a landfill area or if the excavation is adjacent to sources of contamination (e.g. sewage or fuel leaks).

Testing should be conducted before employees enter the trench and should be done regularly to ensure that the trench remains safe. The frequency of testing should be increased if equipment is operating in the trench that could produce airborne contaminants.

Employees required to wear respiratory protection must be trained, fit-tested, and enrolled in the UF Respiratory Protection Program.

Trenches and excavations with hazardous concentrations of airborne contaminants or oxygen deficient atmospheres qualify as confined spaces. When this occurs, compliance with the UF Confined Space Program is also required.

Employees shall not be permitted to work in hazardous and/or toxic atmospheres. These include atmospheres with:

- Less than 19.5% oxygen,
- A combustible gas concentration greater than 20% of the lower flammable limit,
- Concentrations of hazardous substance that exceed those specified in the Threshold Limit Values for airborne contaminants established by the ACGIH.

Standing Water and Water Accumulation: Workers must not enter or work in excavations with standing water or in which water is accumulating unless adequate protection is provided.

Protective methods for these circumstances must include:

- Use of special support or shield systems approved by a registered professional engineer.
- Water removal equipment used and monitored by a competent person.
- Safety harnesses and lifelines used in conformance with 29 CFR 1926.104.

During rainstorms employees must exit the trench. The excavation must be carefully inspected by a competent person after each rain and before employees are permitted to re-enter the trench. Protective measures such as diversion ditches and dikes should be used to limit surface runoff water from entering the excavation.

TRENCH INSPECTION AND ENTRY AUTHORIZATION FORM							
LOCATION:						DATE:	
TIME OF INSPECTION(S):							
WEATHER CONDITIONS:							
CREW LEADER:				SUPERVISOR:			
TRENCH DIMENSIONS		DEPTH =				HAZARDOUS CONDITIONS	
		TOP=		W	L	Below Water Table	
		BOTTOM =		W	L	Wet Soil	
SOIL TYPE		TESTED				Running Sand	
☐ CLAY		YES		☐		Nearby Vibration	
☐ SAND		NO		☐		Disturbed Soils	
☐ FILL						OTHER: SPECIFY	
PROTECTION METHODS				PLACEMENT OF SPOILS AND EQUIPMENT			
SHORING						Spoils at least 2 ft from trench	
				YES	NO	Spoils not adding load	
TIMBER						Backhoe at end of trench	
TRENCH BOX						Vibrating equipment at remote location	
WALL SLOPING				YES	NO	LADDER LOCATION	
1:1 (45°)						Located in protected area	
1 1/2:1 (34°)						Leads to Safe Landing	
2:1 (22.5°)						Within 25' of Safe Travel	
COMMENTS							
COMPETENT PERSON:							

WORKPLACE VIOLENCE

The County of Brunswick is concerned about the increased violence in society, which has also filtered into many workplaces throughout the United States, and has taken steps to help prevent incidents of violence from occurring at County workplaces. The County will not condone any acts or threats of violence against or by County employees or visitors on County premises at any time or while they are engaged in business with or on behalf of the County, on or off County premises.

In keeping with the spirit and intent of this policy, and to ensure that the County's objectives in this regard are attained, the County is committed to the following:

1. To provide a safe and healthful work environment, in accordance with Brunswick County Personnel Policy Manual Section V Policy Safety #530.
2. To take prompt remedial actions up to and including immediate termination, against any employee who engages in any threatening behavior, acts of violence or unsolicited touching of another or who uses any obscene, abusive, threatening language or gestures.
3. To take appropriate action when dealing with citizens, former employees, or visitors to County facilities who engage in such behavior. Such action may include notifying the police or other law enforcement personnel and prosecuting violators of this plan to the maximum extent of the law.
4. To prohibit employees, former employees, contractors, and visitors from bringing unauthorized firearms or other weapons on to County premises or premises occupied by the County.
5. To establish viable security measures to ensure that County facilities are safe and secure to the maximum extent possible and to properly handle access to facilities by the public, off-duty employees, and former employees.

Any employee who displays a tendency to engage in violent, abusive, or threatening behavior, or who otherwise engages in behavior that County, in its' sole discretion, deems offensive or inappropriate will be subject to disciplinary action, up to and including discharge.

In furtherance of this policy, employees have a "duty to warn" their supervisors, department head, security personnel, or human resources director of any suspicious workplace activity, situations, or incidents that they observe or that they are aware of, involving other employees, former employees, contractors, or visitors that appear problematic. This includes, for example, threats or acts of violence, aggressive behavior, offensive acts, threatening or offensive comments or remarks, and the like. Employee reports made pursuant to this policy will be held in confidence to the maximum extent possible. The County will not condone any form of retaliation against any employee for making a report under this plan.

SECTION III –EMERGENCY ACTION PLANNING

EMERGENCY ACTION PLAN

This Emergency Action Plan is intended to provide guidelines on general evacuation and means of egress along with inclement weather procedures that will help provide protection against injury to our employees and customers, damage to property, and disruption of business operations. This will be achieved by auditing work areas, training employees, by procuring and maintaining necessary equipment, and by assigning responsibilities for managing emergency situations. Employees should become familiar with the provisions of this plan in an effort to make their responses automatic for the best possible outcome.

1. Employee Training

- 1.1 Provisions of emergency planning will be reviewed with all assigned employees by the Department Head or their designee:
 - 1.1.1 when the plan is developed,
 - 1.1.2 upon initial employee hire or assignment,
 - 1.1.3 when an employee's designated actions per the plan change, or
 - 1.1.4 the plan is updated or changed.
- 1.2 In order to develop a working plan, Department Directors should discuss the following items within work groups;
 - 1.2.1 Major workplace hazards
 - 1.2.2 Escape route procedures
 - 1.2.3 Fire extinguisher locations and training
 - 1.2.4 Procedures to account for employees
 - 1.2.5 Reporting fire and other emergencies
 - 1.2.6 Employee training programs
 - 1.2.7 Fire prevention practices
 - 1.2.8 Closing doors when exiting
 - 1.2.9 Proper housekeeping- aisles unobstructed
 - 1.2.10 Names and titles of emergency management & fire officials
 - 1.2.11 Alarm systems
- 1.3 Records of this training should be maintained in the department showing the review date, employee name, and person conducting the review. A copy of the written plan is kept in each department and available for review.

ADVERSE WEATHER CONDITIONS

The County Manager is responsible for modification to the work schedule due to inclement weather conditions. No employee is to assume that the workday has been canceled due to weather conditions unless the employee has been informed by their Department Head/Supervisor or public notification.

1. Procedures

- 1.1 The County Manager will consult with the Commissioners to determine whether or not to alter the workday. The County Manager will notify the Deputy County Manager and the Director of Emergency Services and the Public Information Officer (PIO) of the decision and how to proceed. The PIO will immediately initiate the recorded emergency notification to employees and notify the local media of all cancellations/delays.
- 1.2 The County Manager and Deputy County Manager will notify their respective Department Directors by 6:30 a.m. if the workday is to be canceled or delayed.
- 1.3 Department Directors may notify their respective employees, in accordance with their department communication plan, of cancellations/delays and altered work schedules.
- 1.4 Employees may tune into WWAY TV-3, WECT TV-6 or WHQR 91.3 FM to receive emergency notification broadcasts.
- 1.5 All employees with internet access at home are encouraged to visit the Emergency Management web page (www.brunswickcountync.gov) and get up to date emergency notifications.
- 1.6 In addition, any cancellation/delay in workday information will be posted on the front page of the County's website (www.brunswickcountync.gov).

BOMB THREATS

A bomb threat may be received by various means. If a bomb threat is received, follow the list of procedures. ALL BOMB THREATS MUST BE TREATED SERIOUSLY.

1. Procedures

- 1.1 Packages that are suspicious in nature should NOT be opened. If you receive a package through the mail, you do not know who sent it or it has no return address, DO NOT open it. Report it to your supervisor.
- 1.2 A person receiving a bomb threatening phone call should remain calm and attempt to obtain as much information as possible from the caller, record that information (exact words, if possible) and other data about the call. See information on next page pertinent to obtain from caller.

- 1.3 There should be no use of any electronic devices, such as cell phones, wireless computers, or two-way radios, during a bomb threat. Electronic devices have the potential to negatively interact with the signal of any said threat.

BOMB THREAT CHECKLIST

Location of bomb:

Type of bomb:

Time set to go off:

Name of caller:

Address of caller:

Time of call:

Appearance of bomb:

What will cause it to explode?

Who placed the bomb?

Background noises: (music, laughter, traffic, machinery, etc.)

Description of caller's voice-

Male: Female: Adult: Child:

Accent: Speech impediment:

Well-spoken (educated): Foul, vulgar:

Irrational: Incoherent:

Disguised: Familiar:

Sounds like whom:

Exact time caller hangs up:

Document statements made by caller, including any unusual remarks-

EMERGENCY EVACUATION

Brunswick County strives to provide its employees with a safe and healthful work environment. In an effort to do this, the County has put into place the following emergency evacuation procedure. This procedure is such that it may be used in any emergency, which may require an evacuation of a County facility.

1. Procedure

- 1.1 Pre-appointed person(s) immediately activate the building's alarm system and call 911.
- 1.2 All personnel and citizens must exit through stairs and doors, do not use elevators.

- 1.3 Assemble at a predetermined safe area (a minimum of 300 feet from the building).
- 1.4 Designated person to go to the intersection and direct firefighters.
- 1.5 Managers account for co-workers at safe area and notify authorities of anyone missing.
- 1.6 Re-enter the building only after firefighters permit.

2. Department Head Responsibilities

- 2.1 Each department must develop their evacuation plans for their respective worksite(s). Plan for evacuation should include an action team from which directors will establish;
 - 2.1.1 A designated person(s) to call 911 in an event that warrants an evacuation.
 - 2.1.2 A designated person(s) to instruct employees and the general public to the proper exits.
 - 2.1.3 A pre-designated location, 300 ft from building with capability to exit parking area, for all employees to meet during event.
 - 2.1.4 A method of accounting for all co-workers at pre-designated area. If anyone is missing, this position will advise law enforcement.

3. Evacuation Procedures for all Employees

- 3.1 DO NOT USE THE ELEVATOR, use the nearest exit door.
- 3.2 All personnel must cooperate and evacuate the building as directed. Only trained personnel should attempt to extinguish a fire. Ensure valuable items are secured.
- 3.3 DO NOT attempt to move or touch object(s) during an evacuation.
- 3.4 Only return to the building only after it is declared safe by authorities.
- 3.5 During fire and bomb threat emergency evacuations, it will be the responsibility of the Sheriff's Office to notify the Magistrate's and the District Attorney's Office. From there it will be the responsibility of the District Attorney's Office to notify all other State Offices in the Courthouse.

FIRE

A fire in the workplace can happen at anytime and can be in conjunction with another emergency (i.e. thunderstorms). Once detected, a quick reaction and remaining calm will make all the difference. Due to nature of work, the following departments have site specific fire plans: Operation Services; Utilities; Health; Landfill; Sheriff's Office/Jail; and Social Services.

- A. Pre-appointed person(s) immediately activate the building's alarm system and call 911.
- B. All personnel and citizens must exit through stairs and doors, do not use elevators.
- C. Assemble at a predetermined safe area (a minimum of 300 feet from the building).

- D. Designate person to go to the intersection and direct firefighters.
- E. Account for co-workers at safe area and notify authorities of anyone missing.
- F. Re-enter the building only after fire department officials permit.

FLOOD

Departments should prepare their area(s) of responsibility for a flood hazard to protect employees from injury and to safeguard building & property. Preparations may include: backing up computers, storing critical documents, removing equipment/paper from areas known to flood, boarding up windows, and sending employees home before the weather becomes too serious.

Once the emergency passes, employees will be notified of procedures to follow for returning to work. This will be conducted via the County Manager's office working with the Public Information Officer disseminating information to the local news reports. If the building sustains damage, restoration procedures will be addressed by Operation Services.

GAS LEAK

In the event an employee detects gas odor, a gas main may be broken. Employees should implement the building's evacuation procedures. DO NOT turn any electrical switches ON or OFF. There should be no use of any electronic devices, such as cell phones, wireless computers, or two-way radios, during an evacuation. Re-enter the building only after fire department officials permit.

HAZARDOUS MATERIALS

If a release of hazardous material occurs that requires evacuation, follow the procedures identified by emergency personnel as deemed by the National Incident Management System (NIMS). Brunswick County personnel have been trained and can apply the appropriate incident management needed to produce the best possible outcome in this type event.

Special procedures that may need to be followed include; turning off electrical power to the building. Once the spill has been cleaned-up, employees will be notified of procedures to follow for returning to work. This will be conducted via the telephone and/or radio. If the building sustains damage, restoration procedures will be addressed by Operation Services.

Date: February 11, 2013

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN)

Reference: Federal Regulation 40 CFR Part 112, Dated July 17, 2002

Type of Facility: Fleet Motor Fuel/Emergency Generator Tanks

Facility: Brunswick Co. Government
Complex
Facility Address: 151 Government Center Drive
City, State, Zip: Bolivia, North Carolina 28422

Site GPS Location: N34° 03'26"; W78° 09'53"

Tank Owner Home Office: **Owner/Operator:**
Ms. Stephanie Lewis, Operations Services Director
County of Brunswick, NC
PO Box 249
Bolivia, North Carolina 28422-0249
Main Office Phone: (910) 253-2515

SPCC Plan Prepared By:

Henry Nemargut, PE
Henry Nemargut Engineering Services
2211 Chestnut Street
Wilmington, North Carolina 28405
Office Phone: 910-762-5475

The intent of this document is to provide information to Owner/Operator and US EPA for environmental control of Petroleum Products. It will not serve as construction documents, equipment approvals, building code permits or any other intent. **WARNING:** These plans and specifications are each part of an integrated design system. Any modification, alteration, change, deletion, addition, or substitution, of or to any specification(s) could result in property damage, injury,

or even death, and requires a full review of the entire system by a professional engineer. Any unauthorized modification of this document may constitute unlicensed practice as a Professional Engineer and may constitute a crime.

EMERGENCY CONTACT LIST AND TELEPHONE NUMBERS

(Ref. 112.7)

1. Local Fire Department: - 911
2. "Person-In-Charge" of Facility Spill Response & Home Telephone Number and Street Address:
Name: Ms. Stephanie Lewis, Operations Services Director
Home Address: 5 Gilbert Road, Bolivia, NC 28422
Home Phone: None Cell Phone: (910) 512-3071
Office Phone: 910-253-2521
3. Local Emergency Planning Committee or Haz-Mat Response Team, Telephone Number: Brunswick County Emergency Management: 910-253-5383, Bolivia, NC
4. Emergency Cleanup Contractor or Response Facility Name, Telephone Number: SR&R Environmental, Inc., Mr. Rick Miles, Wilmington, NC 910-763-6274
5. State Division of Environmental Management: 910-796-7215 (must call)
6. State Emergency Response Commission: 1-800-451-1403 (must call)
7. Downstream Water Suppliers who need to be notified: _____
8. National Response Center: 1-800-424-8802 (must call)
9. Other Notifications and/or US Coast Guard:

(See APPENDIX F & G for Documentation)

You must report a spill if:

- Discharges that cause a sheen or discoloration on the surface of a body of water;
- Discharges that violate applicable water quality standards; and
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

Reporting a hazardous substance release or oil spill takes only a few minutes. To report a release or spill, contact the federal government's centralized reporting center, the National Response Center (NRC), at 1-800-424-8802. The NRC is staffed 24 hours a day by U.S. Coast Guard personnel, who will ask you to provide as much information about the incident as possible. If possible, you should be ready to report the following:

- Your name, location, organization, and telephone number
- Name and address of the party responsible for the incident
- Date and time of the incident
- Location of the incident Source and cause of the release or spill
- Types of material(s) released or spilled
- Quantity of materials released or spilled
- Danger or threat posed by the release or spill
- Number and types of injuries (if any)
- Weather conditions at the incident location
- Any other information that may help emergency personnel responds to the incident
-

In the event of a spill, the normal course of action is as follows:

SEE PAGES 27 & 28

TABLE OF CONTENTS

	Page
INTRODUCTION	5
GENERAL SPILL PREVENTION CONTROLS AND COUNTERMEASURES REQUIREMENTS	6
PART 1: PLAN ADMINISTRATION	
Management Approval and Designated Person	7
Professional Engineer Certification	7
Location of SPCC Plan	8
Plan Review	8
Facilities, Procedures, Methods, or Equipment Not Yet Fully Operational	8
Cross-Reference with SPCC Provisions	10 & 11
PART 2: GENERAL FACILITY INFORMATION	
Facility Description	12
Evaluation of Discharge Potential	13
PART 3: DISCHARGE PREVENTION – GENERAL SPCC PROVISIONS	
Compliance with Applicable Requirements	16
Facility Layout Diagram	16
Spill Reporting	16
Potential Discharge Volumes and Direction of Flow	18
Practicability of Secondary Containment	18
Containment and Diversionary Structures	18
Inspections, Tests, and Records	19 & 20
Personnel, Training, and Discharge Prevention Procedures	21
Security	21
Tank Truck Loading/Unloading Rack Requirements	23
PART 4: DISCHARGE PREVENTION – SPCC PROVISIONS FOR ONSHORE FACILITIES (EXCLUDING PRODUCTION FACILITIES)	
Facility Drainage	24
Conformance with State and Local Applicable Requirements	24
Bulk Storage Containers	25

TABLE OF CONTENTS

PART 5: DISCHARGE RESPONSE

Response to a Minor Discharge	27
Response to a Major Discharge	27
Waste Disposal	28
Discharge Notification	28
Alternative Oil Spill Contingency Plan	29

LIST OF TABLES

Table 1: Plan Review Log	9
Table 2: SPCC Cross-Reference	10 & 11
Table 3: Potential Discharge Volume and Direction of Flow	13 - 15
Table 4: Oil Discharge History	18
Table 5: Inspection and Testing Program	19
Table 6 Fuel Transfer Procedures	23
Table 7: List of Oil Tanks/Containers	25

APPENDICES

A: Substantial Harm Determination
B: Facility Inspection Checklists
C: Record of Precipitation Release from Secondary Containments
D: Record of Discharge Prevention Briefings and Training
E: Calculation of Secondary Containment Capacity
F: Agency Notification Standard Report
G: Discharge Notification Form
H: Discharge Response Equipment Inventory
I: Site Plan & Map and Facility Diagram
J: Records of Tank Integrity and Pressure Tests
K: Strong Oil Spill Contingency Plan (if applicable)

INTRODUCTION

Purpose

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by this facility to prevent oil discharges from occurring, and to prepare Brunswick County Government Complex, (i.e. This Facility) to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge.

This Plan has been prepared to meet the requirements of Title 40, *Code of Federal Regulations*, Part 112 (40 CFR part 112), and supercedes any earlier Plan developed to meet provisions in effect since 1974.

In addition to fulfilling requirements of 40 CFR part 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

This facility management has determined that this facility does not pose a risk of substantial harm under 40 CFR part 112, as recorded in the "Substantial Harm Determination" included in APPENDIX A of this Plan.

This Plan provides guidance on key actions that this facility must perform to comply with the SPCC rule:

- Y Complete monthly and annual site inspections as outlined in the Inspection, Tests, and Records section of this Plan (pages 17 & 18) using the inspection checklists included in APPENDIX B.
- Y Perform preventive maintenance of equipment, secondary containment systems, and discharge prevention systems described in this Plan as needed to keep them in proper operating conditions.
- Y Conduct annual employee training as outlined in the Personnel, Training, and Spill Prevention Procedures section of this Plan and document them on the log included in APPENDIX D.
- Y If either of the following occurs, submit the SPCC Plan to the EPA Regional Administrator (RA) Office along with other information as detailed in APPENDIX F & G of this Plan:
 - Y The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event; or
 - Y The facility discharges oil in quantity greater than 42 gallons in each of two spill events within any 12-month period.
- Y Review the SPCC Plan at least once every five (5) years and amend it to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been proven effective in the field at the time of the review. Plan amendments, other than administrative changes discussed above, must be recertified by a Professional Engineer on the certification page (page 9) of this Plan.

- Y Amend the SPCC Plan within six (6) months whenever where is a change in facility design, construction, operation, or maintenance that materially affects the facility's spill potential. The revised Plan must be recertified by a Professional Engineer (PE).
- Y Review the Plan on an annual basis. Update the Plan to reflect any "administrative changes" that are applicable, such as personnel changes or revisions to contact information, such as phone numbers. Administrative changes must be documented in the Plan review log on page 9 of this Plan, but do not have to be certified by a PE.

GENERAL SPILL PREVENTION CONTROLS AND COUNTERMEASURES REQUIREMENTS

(Ref. 112.7 (a) (b) (c) & 112.8 (a) (b) (c) (d))

Title 40, Part 112 of the Code of Federal Regulations, final rule amending requirements under 40 CFR 112, July 17, 2002. This part establishes procedures, methods and equipment, and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines. These regulations are applicable to owners or operators of onshore and offshore facilities engaged in producing, storing, transferring, distributing, and/or consuming oil and oil products. EPA has published final amendments to the SPCC rule. This rule amended an existing rule that had been in effect since 1974. This final rule was effective on August 16, 2002 and included dates by which a facility would have to amend and implement its SPCC plan. The EPA subsequently extended the compliance dates. The compliance deadline for revision and professional engineer (PE) certification of SPCC plans is November 10, 2010. This SPCC Plan must be fully implemented immediately.

Key Provisions of the Oil Pollution Prevention Regulation

Subpart A – Applicability, Definitions, and General Requirements. For All Facilities and All Types of Oil

Section 112.1 General Applicability: Section 112.2 Definitions: Section 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan: Section 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator: Section 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators: Section 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans

Subpart B – Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

Section 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities): Section 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities: Section 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities: Section 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities

UNDER US EPA REGULATION 40 CFR PARTS 112.20- YOU MUST SUBMIT A FACILITY RESPONSE PLAN (FRP) TO US EPA IF YOUR FACILITY HAS A MAXIMUM STORAGE CAPACITY GREATER THAN OR EQUAL TO 42,000 GALLONS AND IF THE OPERATIONS INCLUDE OVER WATER TRANSFERS OF OIL TO OR FROM VESSELS. The "Certification of Applicability of the Substantial Harm Criteria." provided as APPENDIX A in this SPCC Plan, gives a checklist for facilities to use in determining if they need to submit an FRP. If the facility answers "yes" to any question on this checklist, an FRP must be submitted.

The prevention of oil spillage and its reaching navigable water is inherent in the design of the bulk plant's physical facilities and operating procedures that will be discussed in detail in subsequent paragraphs. Physical facilities feature storage designs, which include provisions to prevent unauthorized access and thereby insure accountability. Storage tank ullages can be determined, both to prevent overfilling as well as to serve as leak detection capability. Spillage resulting from equipment failure such as broken valves, hose failure, etc. will be contained within secondary containments or diverted too such. The secondary containments are described in subsequent paragraphs. Although operating procedures include precautionary measures to prevent or anticipate overfills, unexpected discharges due to equipment failure, and smaller "house-keeping" drippages, this Plan also addresses contingent and emergency situations which will relate to spill reporting, emergency containment, spill stoppage, safety assurance, and remedial action. If physical facilities do not meet 40-CFR 112 specifications regarding fully effective discharge collection and containment, a full-scope contingency plan, reference 112.7(d) & part 109, will be developed as part of this Plan. Regardless, however, an adequate amount of contingency planning is made for this facility to provide for personnel responsibilities and contact information, spill-response resources and telephone numbers, spill-reporting telephone numbers, and access to dedicated spill-response equipment.

Part 1: Plan Administration

Management Approval and Designated Person (40 CFR 112.7)

This facility is committed to preventing discharges of oil to navigable waters and the environment, and to maintaining the highest standards for spill prevention control and countermeasures through the implementation and regular review and amendment to the Plan. This SPCC Plan has the full approval of this facilities management. This facility has committed the necessary resources to implement the measures described in this Plan.

The Facility Manager is the Designated Person Accountable for Oil Spill Prevention at the facility and has the authority to commit the necessary resources to implement this Plan.

Authorized Facility Representative (facility response coordinator):

Name: Ms. Stephanie Lewis
Director

Title: Operations Services

Signature: _____

Date: _____

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of Part 112 of Title 40 of the *Code of Federal Regulations* (40 CFR part 112) and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR part 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility. [40 CFR 112.3(d)]

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part

112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

This engineer nor his agent did not test for proper operation of any electrical/mechanical/safety equipment, overfill devices, vents, emergency venting, valves, corrosion control systems and any other equipment systems not specifically mentioned.

Name: Henry Nemargut, PE # 017669: STI AST Certification #R10159
NC Professional Engineer License #17669



Date: February 11, 2013

Location of SPCC Plan (40 CFR 112.3(e))

You must maintain a complete copy of the Plan at this facility if this facility is normally attended at least four hours per day.

In accordance with 40 CFR 112.3(e), a complete copy of this SPCC Plan is maintained at the Brunswick County Service Center in the Main Complex. This office is attended whenever the facility is operating, i.e., 8:00 AM to 4:30 PM, 5 days per week.

Plan Review (40 CFR 112.3 and 112.5)

Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), this facility periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- commissioning of containers;
- reconstruction, replacement, or installation of piping systems;
- construction or demolition that might alter secondary containment structures; or
- changes of product or service, revisions to standard operation, modification of testing/inspection procedures, and use of new or modified industry standards or maintenance procedures.

Amendments to the Plan made to address changes of this nature are referred to as technical amendments, and must be certified by a PE. Non-technical amendments can be done (and must be documented in this section) by the facility owner and/or operator. Non-technical amendments include the following:

- change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or
- change in the name or contact information of spill response or cleanup contractors.

This facility must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but *no later than six months* from the date of

the amendment. The Facility Manager is responsible for initiating and coordinating revisions to the SPCC Plan.

Scheduled Plan Reviews

In accordance with 40 CFR 112.5(b), this facility will review this SPCC Plan at least once every five years. Revisions to the Plan, if needed, are made within six months of the five-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3 (d). Owner/operator documentation to review shall state: **"I have completed review and evaluation of the SPCC plan for this facility and will (will not) amend Plan as a result."**

Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded in the Plan Review Log (Table 1 page 9). This log must be completed even if no amendment is made to the Plan as a result of the review. Unless a technical or administrative change prompts an earlier review of the Plan, the next scheduled review of this Plan must occur by **October 17, 2017.**

Facilities, Procedures, Methods, or Equipment Not Yet Fully Operational (40 CFR 112.7)

Bulk storage containers at this facility have never been tested for integrity since their installation. Pages 17 & 18 and APPENDIX B of this Plan describes the inspection program to be implemented by the facility following a regular schedule, including the dates by which each of the bulk storage containers must be tested if applicable.

Table 1: Plan Review Log

By	Date	Activity	PE certification required?	Comments

*Previous PE certifications of this Plan are summarized below.

PE Reviews

Date	Scope	PE Name	Licensing State and Registration No.
10/17/12	Developed original SPCC plan	Henry Nemargut	NCPE #17669

Cross-Reference with SPCC Provisions (40 CFR 112.7)

This SPCC Plan does not follow the exact order presented in 40 CFR parts 112. Section headings identify, where appropriate, the relevant section(s) of the SPCC rule. Table 2 presents a cross-reference of Plan sections relative to applicable parts of 40 CFR part 112

Table 2 Regulatory Cross Reference Table

Regulatory Section/Rule(s)	Summary Rule Description	Plan Section(s)/Page No.
112.7 (a)	General Requirements	
	(1) Discussion of facility's conformance with requirements	Introduction/Pg.-5; General Requirements/Pg.-6
	(2) Deviations from Plan requirements	Pgs.-16 & 17 & APPENDIX B
	(3) Facility characteristics relevant to Plan requirements	Facility Information/Pg.-12; Facility Description/Pg.-12; General Requirements/Pg.-6
	i. Type of oil in each container with storage capacity	Petroleum Product Storage/Pg.-22
	ii. Discharge prevention measures with procedures for routine handling	Discharge Prevention./Pgs.-15 & 16
	iii. Discharge or drainage controls	Facility Drainage/Pg.-21
	iv. Methods of disposal of recovered materials	Drainage from Diked Areas /Pg.-21 & 25
	v. Contact list for facility response coordinators	Page-2
	(4) Information and procedures for incident responses	Response to Spills Pgs.-24 & 25
	(5) Spill and emergency response procedures	Response to Spills Pgs.-24 & 25
	i. Quick reference summary information for facility emergency procedures	Response to Spills Pgs.-24

	ii. Information in supporting appendices	APPENDIX-D, F, & G
112.7 (b)	Fault Analysis	
	i. Procedures when discharge occurs	Response to Spills Pgs.-24 & 25
112.7 l	Secondary Containment	Containment and Diversionary Struct./Pg.-16
112.7 (d)	Contingency Planning	(if required)
	i. Periodic integrity testing of containers	APPENDIX K (if required)
	ii. Periodic integrity and leak testing of valves and piping	APPENDIX K (if required)
	iii. Oil spill contingency plan	APPENDIX K (if required)
	iv. Written commitment of manpower and resources	APPENDIX K (if required)
112.7 (e)	Inspections, tests, and records	Inspections, Tests and Records/Pg. 17 &18
112.7 (f)	Employee training and discharge prevention procedures	APPENDIX D Record of Training
	i. Training of oil-handling personnel	Personnel, Training and Spill Prevention Procedures/Pg. 17 & 18
	ii. Designated discharger prevention accountable persons	Personnel, Training and Spill Prevention Procedures/Pg. 18 & 19
	iii. Schedule of personnel discharge prevention briefings	Personnel, Training and Spill Prevention Procedures/Pg. 18 &19
112.7(g)	Facility Security	
	(1) Fully fenced facility	Security/Pg. 19
	(2) Master flow and drain valve security	Security/Pg. 19
	(3) Oil pump/transfer control security	Security/Pg. 19
	(4) Security of loading/unloading connections	Security/Pg. 19
	(5) Facility lighting to prevent vandalism and theft	Security/Pg. 19

Regulatory Section/Rule(s)	Summary Rule Description	Plan Section(s)/Page No.
112.7 (h)	Tank truck loading/unloading procedures	
	(1) Catchment basin or quick discharge system	Tank Car & Truck Loading/Unloading /Pg. 20
	(2) Means to prevent truck drive-aways	Tank Car & Truck Loading/Unloading /Pg. 20
	(3) Inspection of tanker truck drains/outlets	Tank Car & Truck Loading/Unloading /Pg. 20
112.7 (l)	Brittle fracture evaluation requirements	N/A
112.7 (j)	Conformance with State and Local Requirements	State Rules/Pg.-15 & 21
112.8 (a);	Requirements for on-shore facilities	General Requirements/Pg.-6
112.8 (b)	Facility drainage restrictions	
	(1) Drainage from diked storage areas	Facility Drainage/ Pg. 21
	(2) Valve restrictions	Facility Drainage/ Pg. 21
	(3) Drainage of undiked areas	Facility Drainage/ Pg. 21
	(4) Use of diversions systems	N/A
	(5) Drainage Water Treatment	N/A
112.8 l	Bulk storage containers	
	(1) Material and construction compatibility with contents	Bulk Storage Tanks/Pg. 22
	(2) Secondary containment	Containment and Diversionary Struct./Pg. 16
	(3) Control of accumulated precipitation	Drainage from Diked Areas/Pg. 21

	(4) UST corrosion protection	N/A
	(5) Corrosion protection of partially buried or bunkered tanks	N/A
	(6) Testing of aboveground containers	Inspections, Tests and Records/Pg. 17 & 18 Bulk Storage Tanks/Pg. 22 APPENDIX B
	(7) Monitoring of internal tank heating coils	N/A
	(8) Engineering controls to prevent discharges	Bulk Storage Tanks/Pg. 16
	(9) Observation of effluent treatment facilities	N/A
	(10) Prompt repair of visible discharges from equipment	Bulk Storage Tanks/Pg. 17 & 18
	(11) Positioning/location of mobile containers to prevent discharges	N/A
112.8 (d)	Facility transfer operations, pumping, and facility processes	
	(1) Corrosion protection of underground piping	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(2) Protection of transfer piping connections	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(3) Use of proper piping supports	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(4) Regular inspection of aboveground valves, pipes, and appurtenances	APPENDIX B; Transfer Operations, Pumping and Facility Processes/Pg. 17
	(5) Warning procedures to prevent vehicular damage to aboveground piping	Transfer Operations, Pumping/Pg. 20

Part 2: General Facility Information

Facility: Brunswick County Government
Complex
Facility Address: 151 Government Center Drive
City, State, Zip: Bolivia, NC 28422
Office Phone: 910-253-2515

Type: Fleet Motor Fuel Facility/Generator ASTs
Date of Initial Operations: 1991 through 2006

Tank Owner/Operator: County of Brunswick, NC
 Ms. Stephanie Lewis, Operations Services,
 Dir.
 PO Box 249
 Bolivia, North Carolina 28422-0249

Main Office Phone: (910) 253-2521

Primary contact:

Ms. Stephanie Lewis	Pager: <u>None</u> Cell Phone: <u>910-512-3071</u>
---------------------	--

Facility Description (40 CFR 112.7(a) (3))

Brunswick County Government Complex in Bolivia, NC is a local county government facility operated by the County of Brunswick, NC.

This facility features (4) aboveground storage tanks for private fleet fueling with associated dispensers, and (5) above ground tanks for emergency generator fuel supply. All bulk deliveries of liquid petroleum products made to this operation are received from truck-transport tankers and are transferred by transfer pumps/tanker PTOs into the tank. Products stored are Gasoline, Highway Diesel Fuel, and non-highway generator Diesel fuel. Petroleum dispensing to motor vehicles and motorized equipment does occur at this facility.

Generally, many physical facilities and operational procedures are patterned after guidelines of the National Fire Protection Association's Pamphlet 30 & 30A (Combustible and Flammable Liquids Code) and State and County Building Codes. NFPA 30 is also a partial reference for the U.S. Environmental Protection Agency's Regulation, 40 CFR-Part 112, "Oil Pollution Prevention." Other relevant industry standards are API 340, API 2610, API 653, API 12R1, API 570, API 2350, PEI-RP200 and STI-SP003. Newly constructed facilities must meet the above standards, where applicable.

A supplemental drawing is appended which shows property boundaries, access drainage patterns, on-site buildings, access roads, petroleum storage facilities and general configuration of the facility. This facility is located near the intersection of Old Ocean Highway and Government Center Drive.

Enclosed is a partial map of the area in APPENDIX I.

Evaluation of Discharge Potential (Ref. 112.7(b))

Table 3: Potential Discharge Volumes and Direction of Flow

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Fleet Fueling Facility (Aboveground Storage Tanks)				
Failure of aboveground tank (collapse or puncture below product level)	12,000	Gradual to instantaneous	NW to Pine Log Branch of Lockwoods Folly River	Double Wall Tank
Tank overfill	1 to 120	90 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Pipe failure	60	10 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Leaking pipe or valve packing	600	1 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Fleet Fueling Facility Transport Unloading Area				
Tank truck leak	1 to 3,000	Gradual to instantaneous	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Tank truck leak or failure outside the unloading area	1 to 3,000	Gradual to instantaneous	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Hose leak during truck loading	1 to 150	90 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Fleet Fueling Dispensing Area				
Gasoline and diesel dispenser hose/connections leak	1 to 20	10 gal/minute	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Generator Tank at Fleet Fueling Area – SCG11				
Failure of aboveground tank (collapse or puncture below product level)	2,200	Gradual to instantaneous	NW to Pine Log Branch of Lockwoods Folly River	Double Wall Tank
Tank overfill	1 to 60	30 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Pipe failure	10	1 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Leaking pipe or valve packing	10	1 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
Hose leak during truck loading	1 to 60	30 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 190 gallons
911 Building – Generator Tank – SCG06				
Failure of aboveground tank (collapse or puncture below product level)	2,000	Gradual to instantaneous	NW to Pine Log Branch of Lockwoods Folly River	Double Wall Tank
Tank overfill	1 to 60	30 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 95 gallons
Pipe failure	10	1 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 95 gallons

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Leaking pipe or valve packing	10	1 gal/min	NW to Pine Log Branch of Lockwoods Folly River	Spill Kits to contain 95 gallons
Detention Center Generator Tank – SCG09				
Failure of aboveground tank (collapse or puncture below product level)	970	Gradual to instantaneous	NW to drainage ditches, then southwest to facility retention pond	Double Wall Tank
Tank overfill	1 to 60	30 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 95 gallons
Pipe failure	10	1 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 95 gallons
Leaking pipe or valve packing	10	1 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 95 gallons
Administration Bldg Generator Tank – SCG10				
Failure of aboveground tank (collapse or puncture below product level)	2500	Gradual to instantaneous	South to catch basin with outlet at eastern retention pond, then southeast to Middle Swamp	Double Wall Tank
Tank overfill	1 to 60	30 gal/min	South to catch basin with outlet at eastern retention pond, then southeast to Middle Swamp	Spill Kits to contain 95 gallons
Pipe failure	10	1 gal/min	South to catch basin with outlet at eastern retention pond, then southeast to Middle Swamp	Spill Kits to contain 95 gallons
Leaking pipe or valve packing	10	1 gal/min	South to catch basin with outlet at eastern retention pond, then southeast to Middle Swamp	Spill Kits to contain 95 gallons
70 Stamp Act Drive Generator Tank – SCG12				
Failure of aboveground tank (collapse or puncture below product level)	5000	Gradual to instantaneous	NW to drainage ditches, then southwest to facility retention pond	Steel Containment Dike

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Tank overfill	1 to 120	90 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 190 gallons
Pipe failure	10	1 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 190 gallons
Leaking pipe or valve packing	10	1 gal/min	NW to drainage ditches, then southwest to facility retention pond	Spill Kits to contain 190 gallons

SEE APPENDIX H FOR LOCATIONS AND OIL SPILL EQUIPMENT MATERIALS ON HAND.

PART 3: Discharge Prevention – General SPCC Provisions

The following measures are implemented to prevent oil discharges during the handling, use, or transfer of oil products at the facility. Oil-handling employees have received training in the proper implementation of these measures.

Compliance with Applicable Requirements (40 CFR 112.7(a) (2) (3) (4) & (5))

Regulation 40 CFR part-112.7 (l) & (h) generally requires the following secondary containment systems or their equivalents for Bulk Tanks, Loading & Unloading Racks and Piping Systems: Dikes, berms, retaining walls, curbing, culverting, gutters, weirs, booms, spill diversion ponds, impounding basins, or sumps, and sorbents to be sufficiently impervious.

From US EPA Ombudsman memorandum of August 14, 2002, regarding Sufficiently Impervious.

“Dikes, berms or retaining walls must be sufficiently impervious to contain oil. The purpose of secondary containment is to contain oil from escaping the facility and reaching the environment. An owner or operator of a facility should have flexibility in how he prevents a discharge as described in §112.1(b) and any method of containment which achieves that end is sufficient. Similarly, because the purpose of the “sufficiently impervious” standard is to prevent discharges as described in §112.1(b), dikes, l, or retaining walls must be capable of containing oil and preventing such discharges. Discharges as described in §112.1(b) may result from direct discharges from containers, or from discharges from containers to groundwater that travel through the groundwater to navigable waters. Effective containment means that the dike, berm, or retaining wall must be capable of containing oil and sufficiently impervious to prevent discharges from the containment system until it is cleaned up. The same holds true for containment floors or bottoms; they must be able to contain oil to prevent a discharge as described in §112.1(b). However, “effective containment” does not mean that liners are required for secondary containment areas. Liners are an option for meeting the secondary containment requirements, but are not required by the rule.” (End)

Use Hydraulic Conductivity readings that are site specific: i.e. 0.01 gallons/day/square foot

The reading indicates that for a 1000 sq. ft. dike it would leak 10 gallons per day or total of 30 gallons in 72 hours. Engineered Compacted Clays, Concrete, Liners/Membranes may meet this requirement.

The US EPA does not interpret §112.7(h) (see page 19) to apply beyond activities and/or equipment associated with tank car and tank truck loading/unloading racks. Therefore, loading and unloading activities that take place beyond the rack area would not be subject to the specific sized requirements of 40 CFR §112.7(h) (but, of course, would be subject, where applicable, to the general containment requirements of 112.7l. US EPA interprets §112.7(h) only to apply to loading and unloading “racks.” Under this interpretation, if a facility does not have a loading or unloading “rack,” §112.7(h) does not apply.

US EPA believes that the proper standard of “sufficient freeboard” to contain precipitation is that amount necessary to contain precipitation from a 25-year, 24-hour storm event.

Facility Layout Diagram (40 CFR 112.7(a) (3))

A map is provided for in APPENDIX I showing the general location of the facility. The plot print in APPENDIX I present a layout of the facility and the location of storage tanks and drums. The diagram also shows the location of storm water drain inlets and the direction of surface water runoff. As required under 40 CFR 112.7(a) (3), the facility diagram indicates the location and content of ASTs, USTs, and transfer stations and connecting piping.

Spill Reporting (40 CFR 112.7(a) (4))

The discharge notification form included in APPENDIX G will be completed upon immediate detection of a discharge and prior to reporting a spill to the proper notification contacts.

Potential Discharge Volumes and Direction of Flow (40 CFR 112.7(b))

Distance to Navigable Waters and Adjoining Shorelines and Flow Paths

This facility is provided with spill collection and containment facilities that are intended to prevent spillage from reaching and entering navigable water. Therefore, the predictions described as follows are based upon the failure of normal storage or piping facilities and the additional failure of collection and containment facilities to prevent spillage from escaping the facilities. The following predictions include direction, rate of flow, and total quantity of oil that could be discharged as a result of each major type of failure.

Direction, route, including type of terrain, flow velocity of spills, intersected roads and culverts, name of stream or body of water, distance to water.

The tanks are supplied by deliveries using highway transport tankers. Unloading operations using centrifugal transfer pumps or truck mounted PTOs require the driver-attendant to stand by and monitor the operations. If a hose ruptures, or any other component causes a spill, fast-acting compartmental valves will be closed. The transport, while unloading, is parked on concrete or asphalt surfaces, except for tanks SCG09 and SCG12.

TANKS EMSE01, SCG06, & SCG11 - The surface flow velocity is estimated to be ½ foot per second. If any spillage escapes the secondary containment systems, or from any loading/unloading/dispensing operations, it would flow to the Northwest to the Pine Log Branch of Lockwoods Folly River which traverses the property.

TANKS SCG09, & SCG12 - The surface flow velocity is estimated to be ½ foot per second. If any spillage escapes the secondary containment systems, or from any loading/unloading/generator operations, it would flow to the Northwest to drainage ditches and culvert system which feed the on-site retention pond. The overflow from the retention pond discharges to the Pine Log Branch of Lockwoods Folly River which traverses the property. Pine Log Branch flows west approximately 1.0 mile where it empties into the Lockwoods Folly River.

TANKS SCG10 - The surface flow velocity is estimated to be ½ foot per second. If any spillage escapes the secondary containment systems, or from any loading/unloading/generator operations, it would flow southeast to southwest to catchment basins and culverts which feed the on-site retention pond on the southeast portion of the government complex. The overflow from the southeast retention pond discharges to the Middle Swamp. Middle Swamp flows southeast then southwest approximately 2.8 miles where it empties into the Lockwoods Folly River.

If spilled petroleum leaves the property, then the Brunswick County Emergency Management Agency shall be notified (see page 2). **Every effort will be made to stop or control spillage before it leaves the property or enters the drainage system by use of spill kits, hay bales, sandbags, absorbents, or other approved means.**

Discharge History (see Table 4)

Spills of less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and are discharged more than 100 feet from all surface water bodies do not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense. SEE APPENDIX'S D, F & G

You must report to US EPA Region IV, whenever this facility has discharged more than 1,000 gallons of oil in a single discharge or discharged more than 42 gallons of oil in each of two discharges occurring within any 12-month period.

Table 4 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the facility where oil is stored, used, or handled.

Table 4 summarizes the facility's discharge history. (As of Current Date of SPCC Plan)

SEE APPENDIX'S D, F & G

Table 4 –Oil Discharge History (within 12 months)

Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence

Practicability of Secondary Containment (40 CFR 112.7(d))

This facilities management has determined that secondary containment is practicable at this facility. (see page 26 & APPENDIX K if required)

Containment and Diversionary Structures (40 CFR 112.7I)

Methods of secondary containment at regulated facilities may include a combination of structures (e.g., dikes, I, built-in secondary containment, remote impounding), quick catchment drainage systems (e.g., oil/water separators, curbed concrete pads), and/or land-based spill response (e.g., drain covers, sorbents) to prevent oil from reaching navigable waters and adjoining shorelines:

THIS FACILITY IS EQUIPPED AS FOLLOWS: All tanks at this facility are constructed of steel in accordance with UL-142 with approved steel secondary containment systems (double wall tanks or steel containments) which are not open to rainwater infiltration. The dikes net containment volume **DOES** provide sufficient storage capacity for the largest tank plus 10 percent. The tanks are hydrostatically gauged for product volume levels. Spill kits are used for equivalent protection for pumps and aboveground piping not installed within the secondary containment area.

General secondary containment for transport unloading, and motor vehicle refueling is provided for with on site spill kits design to contain 95-190 gallons. Transport unloading fill pipe connections are provided with steel "Spill Boxes" design to contain small spills not exceeding 7 gallons. **Every effort will be made to stop or control spillage before it leaves the property. In the event of a spill during a rain event, the stormwater drainage areas at the facility must be sealed via hay bales, absorbents, booms, skimmers or other approved means.**

The flow path of spillage from aboveground storage facilities or transfer facilities traverse earthen/gravel yards or asphalt/concrete surfaces. **Generally, the transport unloading connection**

areas are sloped causing any surface spill to flow to a single point to allow for emergency (i.e. emergency damming of the stormwater drainage ditch in the event of a spill).

As described on the supplemental drawing, secondary containment systems exist for the aboveground storage tanks. Transport unloading areas, aboveground piping and dispensers also have secondary containment via spill kits and steel spill boxes.

Inspections, Tests, and Records (40 CFR 112.7(e))

As required by the SPCC rule, this facility performs the inspections, tests, and evaluations listed in the following table. Table 5 summarizes the various types of inspections and tests performed at the facility. The inspections and tests are described later in this section, and in the respective sections that describe different parts of the facility (e.g., APPENDIX B for bulk storage containers and facility equipment).

PE has established baseline conditions by using the UL-142 tank construction manual. Hydrocarbon corrosion rates are typically 2 mils per year. Baseline conditions established by know construction standards and typical corrosion rates. Site specific conditions will determine tank baseline condition requirements:

TANK(S) (AGE OF USED TANKS UNKNOWN)		
Maintenance & Water removal records on file:	☐ YES	☒ NO
Interim I&M for proper maintenance to be implemented	☐ YES	☒ NO
Integrity Test for baseline conditions	☐ YES	☒ NO

Table 5: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
Aboveground container	Test container integrity or provide equivalent environmental protection. Combine visual inspection with another testing technique (non-destructive shell testing). Inspect outside of container for signs of deterioration and discharges.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Container supports and foundation	Inspect container's supports and foundations.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Liquid level sensing devices (overfill)	Test for proper operation.	Annual
Diked area	Inspect for signs of deterioration, discharges, or accumulation of oil inside diked areas. Visually inspect content for presence of oil.	Monthly Prior to draining
Lowermost drain and all outlets of tank truck	Visually inspect.	Prior to filling and departure
Effluent treatment facilities	Detect possible system upsets that could cause a discharge.	Daily, monthly
All aboveground valves, piping, and appurtenances	Assess general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.	Monthly
Buried metallic storage tank	NA	Annually

Facility Component	Action	Frequency/Circumstances
Buried piping	Inspect for deterioration.	Whenever a section of buried line is exposed for any reason.
	Integrity and leak testing.	At the time of installation, modification, construction, relocation, or replacement.

Daily Inspection

A facility employee performs a complete walk-through of the facility each day. This daily visual inspection involves: (1) looking for tank/piping damage or leakage, stained or discolored soils, or excessive accumulation of water in containment sumps; and (2) observing the effluent from the retention pond system.

Monthly Inspection

The checklist provided in APPENDIX B is used for monthly inspections by facilities personnel. The monthly inspections cover the following key elements:

- Y Observing the exterior of aboveground storage tanks, pipes, and other equipment for signs of deterioration, leaks, corrosion, and thinning.
- Y Observing the exterior of portable containers for signs of deterioration or leaks.
- Y Observing tank foundations and supports for signs of instability or excessive settlement.
- Y Observing the tank fill and discharge pipes for signs of poor connection that could cause a discharge, and tank vent for obstructions and proper operation.
- Y Verifying the proper functioning of overfill prevention systems.
- Y Checking the inventory of discharge response equipment and restocking as needed.
- Y Observing the effluent and measuring the quantity of accumulated oil within u/g piping sumps.

All problems regarding tanks, piping, containment, or response equipment must immediately be reported to the Facility Manager. Visible oil leaks from tank walls, piping, or other components must be repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Pooled oil is removed immediately upon discovery.

Written monthly inspection records are signed by the Facility Manager and maintained with this SPCC Plan for a period of three years.

Annual Inspection

Facility personnel perform a more thorough inspection of facility equipment on an annual basis. This annual inspection complements the monthly inspection described above and is performed in September-October of each year using the checklist provided in APPENDIX B of this Plan.

The annual inspection is preferably performed after a large storm event in order to verify the imperviousness and/or proper functioning of drainage control systems such as the dike, berms, control valves, and the retention pond system as applicable.

Written annual inspection records are signed by the Facility Manager and maintained with this SPCC Plan for life of the tanks.

Periodic Integrity Testing

In addition to the above monthly and annual inspections by facility personnel, certification of tank integrity testing may be required (if equivalent environmental protection is not provided). Tanks as noted in APPENDIX B are periodically evaluated by an outside certified tank inspector(s) following the Steel Tank Institute (STI) *Standard for the Inspection of Aboveground Storage*

Tanks, SP-001, (latest version), and or API 653 as described on page 17 & APPENDIX B notes of this Plan.

PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES

(Ref. 112.7 (f))

Facilities Designated Person For Oil Spill Prevention:

NAME: Ms. Stephanie Lewis

Training Scope and Frequency

At least annually all personnel are given training in oil spill prevention, including operation and maintenance of equipment. They are given thorough reviews of all parts of this SPCC Plan, both for routine operations and for emergency situations. Where specific responsibilities are assigned, these requirements will be reviewed. All such training occasions will be documented with an employee roster that is signed by each employee. This document will be kept in the master binder or file of the SPCC Plan. See APPENDIX D "Record of Annual Discharge Prevention Briefings and Training." A copy of the Plan will be on display, accessible to all employees at all times.

New employees will be given as much spill prevention training as is commensurate with his new status and ability to be effective. This training will be provided within one week of his employment. Training for all employees will include references and analysis of any past spills and the experience resulting there from.

The Person-in-Charge of Oil Prevention (generally, the same for supervising oil spill reactions and counter- measures) will designate specific personnel to (1) make contacts and report spills in a spill incident, (2) undertake control of spillage, assure containment, retrieve spillage, (3) restore property and remediate contaminated property except where an outside cleanup contractor may perform this function. The designated spill response employees, with the Person-in-Charge in command, will undertake a rehearsal of a spill incident. The rehearsal will include an investigation of the potential flow route of spillage with special attention given to strategic points to achieve barricading, sealing, and containment: curbs, drains, culverts, open ditches.

The Person-in-Charge will utilize the "Contact List and Telephone Numbers" page 2 in developing a training session for oil-spill response.

SECURITY

(Ref. 112.7 (g))

Fencing

It is US EPA's view that, as a general matter, adequately fencing all discrete areas directly involved in the handling, processing and storage of oil would provide equivalent environmental protection to fencing the entire footprint of the facility, since it is potential for harm to this

equipment that poses the risk addressed by the fencing requirement. Fencing may be substituted where the facility is equipped with a “pump house” or “pump shack,” which contains, among other appropriate things, a master disconnect switch from which all power to pumps and containers is cut off when the facility is unattended. This approach would appear to generally provide environmental equivalent protection to fencing for risks associated with the potential for unauthorized access to pumping equipment; however, it does not appear to provide protection equivalent to fencing as it relates to risks to containers, piping and appurtenances not associated with the petroleum handling equipment.

Currently, this facility does not have perimeter security fencing and gates around oil storage tanks and equipment; however, the grounds at this site are routinely patrolled by the Brunswick County Sheriff Department whose main facility is located on the grounds and is manned 24 hours/day.

Valves

Locking of valves during non-operating and unattended hours is not possible at this facility since the fuel tanks are operated continually for EMS/Sherrif Dept. use and generators are always on standby.

Pumps

The electrical power to the transfer pumps shall pass through at least one switch in the “off” position and accessible only to authorized personnel during non-operating and unattended hours.

Piping

Piping connections not in service or out of service for six months or more shall be capped or blank-flanged. All piping connections in service shall be color-coded or equipped with product identification signs.

Lighting

This fueling facility is equipped with area lights.

LOADING AND UNLOADING FACILITIES

(Ref. 112.7 (h) & 112.8 (d))

Transportation rules: In addition to the EPA UST and SPCC regulations, the U.S. Department of Transportation has hazardous material regulations related to driver training, emergency preparation, and incident reporting and emergency response. Training regulations, for example, can be found at 49 CFR parts 172, and loading and unloading regulations can be found at 49 CFR 177.834 and 49 CFR 177.837.

40 CFR 112.7 (h) *Facility tank car and tank truck loading/unloading rack*: (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility. (2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines. (3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(A) NA

(B) Unloading-Transport or Tank Wagons:

Tanker transport compartments are emptied into storage tanks through flexible hoses. The attending driver will verify that the tank to be served actually has the reserve capacity to hold the intended delivery. Upon completion of filling a tank (or emptying a compartment) the compartment valve will be closed, the hose disconnected, and the end elevated so that the hose can be completely drained before removal from the tank fill opening or pump intake piping. Immediately before filling a tank, its available storage ullage is determined by gauging or stick readings. During the transfer, the drivers are alert for proper tank venting and transfer hose integrity. During filling each compartment, all other compartment hatches are kept closed.

Fuel Transfer Procedures Table-6

Stage	Tasks
Prior to loading/unloading	- Y Visually check all hoses for leaks and wet spots. - Y Verify that sufficient volume (ullage) is available in the storage tank or truck. - Y Lock in the closed position all drainage valves of the secondary containment structure. - Y Secure the tank vehicle with wheel chocks and interlocks. - Y Ensure that the vehicle's parking brakes are set. - Y Verify proper alignment of valves and proper functioning of the pumping system. - Y If filling a tank truck, inspect the lowermost drain and all outlets. - Y Establish adequate bonding/grounding prior to connecting to the fuel transfer point. - Y Turn off cell phone.
During loading/unloading	- Y Driver must stay with the vehicle at all times during loading/unloading activities. - Y Periodically inspect all systems, hoses and connections. - Y When loading, keep internal and external valves on the receiving tank open along with the pressure relief valves. - Y When making a connection, shut off the vehicle engine. When transferring Class 3 materials, shut off the vehicle engine unless it is used to operate a pump. - Y Maintain communication with the pumping and receiving stations. - Y Monitor the liquid level in the receiving tank to prevent overflow. - Y Monitor flow meters to determine rate of flow. - Y When topping off the tank, reduce flow rate to prevent overflow.
After loading/unloading	- Y Make sure the transfer operation is completed. - Y Close all tank and loading valves before disconnecting. - Y Securely close all vehicle internal, external, and dome cover valves before disconnecting. - Y Secure all hatches. - Y Disconnect grounding/bonding wires. - Y Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan. - Y Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage. - Y Remove wheel chocks and interlocks. - Y Inspect the lowermost drain and all outlets on tank truck prior to departure. If necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit.

PART 4: Discharge Prevention – SPCC Provisions for Onshore Facilities

FACILITY DRAINAGE

(Ref. 112.8 (b))

Drainage from Diked Areas

Diking/Berm systems approved under this regulation will accumulate water; such water will not infiltrate or seep away. Therefore, drainage of water accumulation must be restrained for evaluation before release. If water has no perceptible contamination, it may be removed by one of the following methods. The underlined methods apply to this facility:

1. Normally Closed (N.C.) external pipe gate valve(s).
2. Accumulation sumps and manually controlled pumpout.
3. Siphon pump arrangement, manually started.
4. Evaporation
5. Sealed Double Wall Tank

If water has perceptible contamination it will be transferred to a holding tank for subsequent treatment or it will be transferred directly into a transport tanker for disposal. Each occasion of water removal from the diked area is recorded on the form, "Precipitation Accumulation in Secondary Containments" found in APPENDIX C.

The unloading transport areas must be kept clean and any small spills must be cleaned up immediately. Any spillage resulting from these areas, which do not have secondary containment, must be controlled under the provisions of this regulation and NC laws. All on site storm drain catch basins and trench drains must be sealed in the event of a petroleum spill. Spill kits are present and maintained in transport tanker unloading areas to contain spills and prevent releases from reaching navigable waters.

Conformance with State and Local Applicable Requirements (40 CFR 112.7(i))

Spills less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and is discharged more than 100 feet from all surface water bodies does not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense. SEE APPENDIX'S D, F & G

If required, all bulk storage tanks at this facility are registered with the state and local authorities and have current certificates of registration and special use permits required by the local fire code.

If required all USTs at the facility meet all requirements Federal & State UST regulations, including cathodic protection, double-wall construction, and monitoring systems.

If applicable, treated storm water runoff is discharged to nearby ditches/streams as permitted under NPDES permits or State regulations. Under Stormwater management plans, the maximum allowable daily oil/grease concentration is 15 mg/L. Grab samples are taken each quarter, following the monitoring requirements specified in the NPDES permit.

standard engineering practices and industry standards. Total aggregate aboveground tank capacity is 60.670 gallons.

FACILITY TRANSFER OPERATIONS

(Ref. 112.7 (h) & 112.8 (d))

Piping Locations

The aboveground fill piping is installed from the tanks directly into the transfer spill boxes. Product piping from the fleet fueling ASTs to the fuel dispenser(s) is aboveground steel piping to the u/g piping containment sumps, and underground double wall flexible piping with secondary containment sumps to the dispensers. Piping from generator tanks SCG09, SCG10 and SCG11 is aboveground piping inside the generator enclosures. . Piping from generator tank SCG06 is aboveground piping inside the generator room building. Piping from generator tank SCG12 is copper which runs from the top of the AST to chase piping underground piping to the generator trailer housing.

Piping Characteristics and Corrosion Protection

All aboveground piping is Schedule 40 (Std. Wt.) wrought steel pipe fabricated with malleable iron fittings or copper tubing. Aboveground steel piping is painted or galvanized for protection against corrosion. All piping must be properly labeled for product stored. Any underground steel piping must be ensured that proper corrosion protection is applied.

Any new or replaced underground piping (after 8-16-02) will meet the same standards as UST Regulation 40 CFR Part 280 or NC standards: either a properly coated and cathodically protected steel pipe or UL-approved fiberglass or double wall flex pipe.

Inspections and Testing

All aboveground valves, piping, and attached equipment are subjected to monthly examinations by operating personnel. Such inspections are implemented using the form found under “Inspections, Tests, Records” APPENDIX B of this SPCC Plan.

The underground piping must be tightness tested, using the same standards as UST regulation 40 CFR, part 280, when the underground piping is repaired or modified. Records of the above tests are kept for Ten years.

Piping Protection

Underground piping has been installed to ensure that it is sufficiently deep or otherwise protected to prevent damage. Where aboveground piping and equipment are exposed to possible vehicular damage, protective barriers should be erected or concrete curbing or bases have been provided. All aboveground product piping must be properly supported to prevent kinks, bends, and undo stresses on piping and tank connections.

Part 5: Discharge Response

This section describes the response and cleanup procedures in the event of an oil discharge. The uncontrolled discharge of oil to groundwater, surface water, or soil is prohibited by state and possibly federal laws. Immediate action must be taken to control, contain, and recover discharged product.

In general, the following steps are taken:

- Eliminate potential spark sources;
- If possible and safe to do so, identify and shut down source of the discharge to stop the flow;
- Contain the discharge with sorbents, berms, fences, trenches, sandbags, or other material;
- Contact the Facility Manager or his/her alternate;
- Contact regulatory authorities and the response organization; and
- Collect and dispose of recovered products according to regulation.

For the purpose of establishing appropriate response procedures, this SPCC Plan classifies discharges as either “minor” or “major,” depending on the volume and characteristics of the material released.

A list of Emergency Contacts is provided on page 2. The list is also posted at prominent locations throughout the facility. A list of discharge response material kept at the facility is included in APPENDIX H.

Response to a Minor Discharge

A “minor” discharge is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor discharges are generally those where:

- The quantity of product discharged is small (e.g., may involve less than 10 gallons of oil);
- Discharged material is easily stopped and controlled at the time of the discharge;
- Discharge is localized near the source;
- Discharged material is not likely to reach water;
- There is little risk to human health or safety; and
- There is little risk of fire or explosion.

Minor discharges can usually be cleaned up by Facility personnel. The following guidelines apply:

- Immediately notify the Facility Manager.
- Under the direction of the Facility Manager, contain the discharge with discharge response materials and equipment. Place discharge debris in properly labeled waste containers.
- The Facility Manager will complete the discharge notification form (APPENDIX G) and attach a copy to this SPCC Plan.
- If the discharge involves more than 25 gallons of oil, the Facility Manager will call the State/Local Department of Environmental Protection Incident Response Division (See page 2).

Response to a Major Discharge

A “major” discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as when:

- The discharge is large enough to spread beyond the immediate discharge area;
- The discharged material enters water;
- The discharge requires special equipment or training to clean up;
- The discharged material poses a hazard to human health or safety; or
- There is a danger of fire or explosion.

In the event of a major discharge, the following guidelines apply:

- All workers must immediately evacuate the discharge site via the designated exit routes and move to the designated staging areas at a safe distance from the discharge. Exit routes are included on the facility diagram and posted in the maintenance building, in the office building, and on the outside wall of the outside shed that contains the spill response equipment.
- If the Facility Manager is not present at the facility, the senior on-site person notifies the Facility Manager of the discharge and has authority to initiate notification and response. Certain notifications are dependent on the circumstances and type of discharge. For example, if oil reaches a sanitary sewer, the publicly owned treatment works (POTW) should be notified immediately. A discharge that threatens Navigable Waters may require immediate notification to downstream users such as the public drinking water intakes.
- The Facility Manager (or senior on-site person) must call for medical assistance if workers are injured.
- The Facility Manager (or senior on-site person) must notify the Fire Department or Police Department.
- The Facility Manager (or senior on-site person) must call the spill response and cleanup contractors listed in the Emergency Contacts list in APPENDIX F & G.
- The Facility Manager (or senior on-site person) must immediately contact the State Department of Environmental Protection Incident Response Division ([919-733-5291](tel:919-733-5291)) and the National Response Center ([800-424-8802](tel:800-424-8802)).
- The Facility Manager (or senior on-site person) must record the call on the Discharge Notification form in APPENDIX H and attach a copy to this SPCC Plan.
- The Facility Manager (or senior on-site person) coordinates cleanup and obtains assistance from a cleanup contractor or other response organization as necessary.

If the Facility Manager is not available at the time of the discharge, then the next highest person in seniority assumes responsibility for coordinating response activities.

Waste Disposal

Wastes resulting from a minor discharge response will be containerized in impervious bags, drums, or buckets. The facility manager will characterize the waste for proper disposal and ensure that it is removed from the facility by a licensed waste hauler within two weeks.

Wastes resulting from a major discharge response will be removed and disposed of by a cleanup contractor.

Discharge Notification

Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the

National Response Center (1-800-424-8802). The Center is staffed 24 hours a day. A summary sheet is included in APPENDIX F & G to facilitate reporting.

Spills less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and is discharged more than 100 feet from all surface water bodies does not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense. SEE APPENDIX'S D, F & G

BRUNSWICK COUNTY GOVERNMENT COMPLEX, LLC ALTERNATIVE OIL SPILL CONTINGENCY PLAN & DISCHARGE RESPONSE

Ref. 112.7 (d)

Under 40 CFR 112.7 (d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c) (2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in § 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following: (1) An oil spill contingency plan following the provisions of part 109 of this chapter. (2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

EPA believes that it may be appropriate for an owner or operator to consider costs or economic impacts in determining whether he can meet a specific requirement that falls within the general deviation provision of §112.7(a)(2). EPA states that cost can be considered but cannot be the only consideration. EPA believes so because under this section, the owner or operator will still have to utilize good engineering practices and come up with an alternative that provides "equivalent environmental protection." However, EPA believes that the secondary containment requirement in §112.7(d) is an important component in preventing discharges as described in §112.1(b) and is environmentally preferable to a contingency plan prepared under 40 CFR part 109. The owner or operator may only provide a contingency Plan in his SPCC Plan and otherwise comply with §112.7(d). Therefore, the purpose of a determination of impracticability is to examine whether space or other geographic limitations of the facility would accommodate secondary containment; or, if local zoning ordinances or fire prevention standards or safety considerations would not allow secondary containment; or, if installing secondary containment would defeat the overall goal of the regulation to prevent discharges as described in §112.1(b). EPA clarifies their main point that owners must not opt for a contingency plan in place of containment simply because contingency plans are cheaper. Without question, secondary containment is a top priority of the EPA and marketers must demonstrate best efforts in attempting to provide containment where practical

See APPENDIX H Discharge Response Equipment Inventory

(A) Reason of Impracticability for Loading/Unloading Operations & Systems

NA (Owner will provide General Secondary Containment)

(B) Commitment of Spill Response Capability

(Describe sources, locations, commitment arrangements, dedicated equipment and materials, mobility.)

Every effort will be made to stop or control spillage before it enters the stormwater drainage ditching/culverts on the property. The drainage ditching must be dammed/sealed via hay bales, sandbags, absorbents, booms, skimmers or other approved means. Owner shall provide materials and equipment to provide for effective containment of spills during precipitation events. See APPENDIX H & Site Print.

Even though the spill contingency plan is not required, the owner has established the following plan of action. If a major spill occurs, the following steps will be enacted:

1. Spill source will be stopped if possible.
2. Office will be notified concurrent with stoppage effort.
3. Local Fire Department will be summoned, if circumstances require their presence.
4. Spill will be contained on site if safe and possible.
5. Absorbent, sand and dedicated tools are stored on site at the bulk plant.
6. State and Federal oil spill notifications will be made (see APPENDIX F).
7. Cleanup and restoration measure will be performed.

NOTE: A written and rehearsed plan of the above steps will include telephone numbers, names, and responsibilities of staff persons (if applicable).

Every effort must be made to contain the spill on the property. The petroleum spill must not leave the property and must not enter storm drains, or tributaries to creeks and streams. If spill reaches open ditching or storm drain catchment basins, then sand, absorbents drain plugs, haybales, or other material must be used to dam the ditch or seal the drains and prevent further downstream migration. If spilled petroleum leaves the property then Brunswick County Emergency Management and City/County Fire Department must be notified ASAP (see page 2).

**APPENDIX A
ATTACHMENT C-II CERTIFICATION OF SUBSTANTIAL HARM
DETERMINATION FORM**

FACILITY NAME: BRUNSWICK COUNTY GOVERNMENT COMPLEX, LLC

FACILITY ADDRESS: 200 E. RIVER ST., BOLIVIA, NC 28422

1. Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons and do the operations include over water transfers of oil to or from vessels?

YES _____ NO X _____

2. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility without secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground storage tank within the storage area?

YES _____ NO X _____

3. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance as calculated using the appropriate formula in Attachment C-III or an *alternative formula such that a discharge from the facility could cause injury to fish and wildlife and sensitive environment? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

YES _____ NO X _____

4. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula, such that a discharge from the facility would shut down a public drinking water intake?

YES _____ NO X _____

5. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and within the past 5 years, has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons?

YES _____ NO X _____

*If an alternative formula is used, documentation of the reliability and analytical soundness of the alternative formula must be attached to this form.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature: _____

Title: Operations Services Director

Name: Ms. Stephanie Lewis

Date: _____

(Please type or print)

APPENDIX B

INSPECTIONS, TESTS, RECORDS

Part I

Ref. 112.7 (e) & 112.8 (c)

The inspections are for the basic part of the Plan. All owner inspection records are to be kept for a period of 3 years. All Integrity testing documentation should be kept for the life of the facility. Copies of this form should be made for future use. This engineer has used Steel Tank Institutes (STI) Standard for "Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible & Flammable Liquids" SP001 for testing and inspection standards. For a copy contact STI, 570 Oakwood Road, Lake Zurich, IL 60047, phone-847/438-8265, www.steeltank.com. This engineer has also used the equivalent environmental protection requirements (see notes) allowed by US EPA 40 CFR §112.7(a) (2). Tanks that meet US EPA Equivalent Environmental Protection will not have integrity testing requirements (see notes).

Periodic tank inspections are to be performed by the tank owner or his designate.

Qualified tank

inspectors are to perform the certified tank testing/inspections. Qualified tank inspectors are those who

are certified by API or STI. The interval for the initial inspection shall be based on the AST's initial service date.

Shop Fabricated Tanks Only

STI Category I Tanks: ALL: STI Category II Tanks: NA: STI Category III Tanks NA

(All inspections monthly except as noted, inspector initials required in monthly boxes.) YEAR-20

Tank Number__	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
*Storage Tank(s) No. <u>ALL</u> Meet US EPA Equivalent Environmental Protection per Table Notes												
Tank Leakage (visual)												
Tank Painting/Coating												
Tank Interstitial Space Test (visual monthly if applicable)												
Inspect & Clean PV Vents & Emergency Vents. (Quarterly)												
Water in Tanks (annual)												
**Tank Exterior Testing for Tanks not in Contact with Ground per STI SP001 (NA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
**Tank Interior Testing for Tanks in Contact with Ground (NA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Verify all Overfill/Leak Detection Systems Working Properly-Yearly.												
Manhole Covers & Gaskets (Visual)												
Tank Synthetic Liner/Barrier with continuous leak detection Visible Signs of Leakage around the Tank, Concrete Pad/Liner, Containment, Ringwall or Ground												
Tank Foundations & Supports												

Evidence of Tank Settlement or Foundation Washout?												
Tank grounding lines in good condition?												
Cathodic Protection Systems												

INSPECTIONS, TESTS, RECORDS

Part II

Shop Fabricated Tanks Only

(All inspections monthly except as noted, inspector initials required in monthly boxes.) Year-20

Tank Number_____	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
P/V Vents, Open & Operative												
Deformation in Vicinity of Piping Connection at Tank												
Tank Insulation Water Tight												
Tanks Below 1,320 Gallons Daily visual inspection only-												
55 gallon drums (visual inspection only)												
55 gallon drums (visual inspection only)												
Lowermost Drain and all Outlets of Tank Truck: Visually Inspect Prior to Filling and Departure												
DISPENSERS & PIPING												
Piping, Aboveground												
Gaskets Emergency Vents (Yearly)												
Cathodic Protection Systems (As Required)												
Hydrostatic Relief Valves												
Valves, Gate Check, Strainers												
#Piping, Valves, Integrity & Leak Testing when repairs/modifications done												
Buried Piping: Inspect for Deterioration Whenever a section of buried piping is exposed for any reason												
Unloading Hoses, Dry-Rotting												
Unloading Couplings, Unions												
Pumps, Lubrication, Supports												
Water Test Valves												
Is electrical wiring for control boxes/lights/pumps in good condition												
SECONDARY CONTAINMENT												
Dike/Berm-Remote Impounding State of Repair, as Applicable												
Pads for Loading & Unloading with secondary containment												

Effluent treatment Oil-Water Separator & Piping												
Site Drainage, Check for settlement into the base of the tank that would direct rain water under the tank rather than away from it.												

INSPECTIONS, TESTS, RECORDS

Part III

Shop Fabricated Tanks Only

(All inspections monthly except as noted, inspector initials required in monthly boxes.) Year-20

Tank Number _____	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Area free or Weeds, Trash, other Materials												
Check Operation of Secondary Containment Drain Valves												
Site Drainage (Yearly)												

A trained/experienced employee will perform a complete walk-through of the facility each day. This daily visual inspection involves:
 (1) looking for tank/piping damage or leakage, stained or discolored soils, or excessive accumulation of water in diked and bermed areas; (2) if applicable observing the effluent from the oil/water separator; and (3) verifying that all secondary containment drain valves are securely closed. Owner's inspectors must also be familiar with pumping, piping and valve operations of the AST system.

NOTES: The regulation 112.8 (c) (6) States: "Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs....Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas."

****EQUIVALENT ENVIRONMENTAL PROTECTION:** BRUNSWICK COUNTY GOVERNMENT COMPLEX, LLC, is deviating from the integrity testing provision of §112.8(c)(6) for All Tanks (ASTs) based on good engineering practice after considering the tank installation and alternative measures, the requirements of Steel Tank Institute (STI) Standard SP-001, and alternative measures implemented by the facility. All tanks are constructed in accordance with UL-142 aboveground rectangular/horizontal tanks and all sides of the tanks are visible (except for secondary bottoms). Tanks are inspected daily/weekly/monthly for leaks.

All tanks are operated in a way that US EPA generally accepts an approach that combines visual inspection with placement of a barrier between the container and the ground, designed and operated in a way that ensures that any leaks are immediately detected, to be considered "equivalent" to integrity testing. The above tanks are not insulated, and the outside secondary tank surface of the tank shells can therefore be observed on an ongoing basis (except for tank secondary bottoms).

The above tanks are double walled located over concrete floors, which functions as a release prevention barrier and has properly sized containment in accordance with §112.8(c) (2).

Under SP-001, the tanks are considered Category 1 tanks (aboveground storage tank with spill control) and therefore require periodic inspection of the tanks. The owner/operator personnel performing these inspections are knowledgeable of storage facility operations, characteristics of the liquid stored, the type of aboveground storage tanks and its associated components. Owner/operator personnel perform monthly and annual inspections, as described on pages 17-18 and APPENDIX B of this Plan.

The scope of inspections and procedures is covered in the training provided to employees involved

in handling oil at the facility. The routine inspections focus specifically on detecting any change in conditions or signs of product leakage from the tank, piping system, and appurtenances.

In accordance with inspection procedures outlined in this Plan, if signs of leakage or deterioration from the tanks are observed by owner/operator personnel, the tanks is to be inspected by a tank inspector certified by the American Petroleum Institute or Steel Tank Institute to assess its suitability for continued service, according to SP-001.

Owner/operator personnel who conduct inspections are qualified through training, education and/or experience. The tank's physical configuration, combined with monthly and annual inspections, ensures that any small leak that could develop in the tank shell will be detected before it can become significant, escape secondary containment, and reach navigable waters.

US EPA generally believes an approach that combines visual inspection with placement of a barrier between the container and the ground, designed and operated in a way that ensures that any leaks are immediately detected, to be considered "equivalent."

You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement. However, US EPA does not require pressure testing or any other specific method. EPA agrees that, subject to good engineering practice, pressure testing every three or four years may be warranted in addition to regular inspection of aboveground valves, piping, and appurtenances.

APPENDIX C
PRECIPITATION RELEASE FROM SECONDARY CONTAINMENTS
 (Ref. 112.8 (b))

This record must be completed when rainwater from diked areas is drained into a storm drain or into an open watercourse, lake, or pond, and bypasses the water treatment system. The bypass valve must normally be sealed in closed position. It must be opened and resealed following drainage under responsible supervision.

Evacuation from secondary containment, dikes, impoundments, overflow receptors:

Date	Diked Area	Presence of Oil	Time Started	Time Finished	INSPECTOR'S Signature

APPENDIX D

Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

[illegible]

APPENDIX E

Calculation of Secondary Containment Capacity

The maximum 24-hour rainfall recorded in the last 25 years at this location is 6.0 inches.

Bulk Storage Dike/Berms

All tanks are double wall with containments not open to rainwater infiltration, capable of containing complete volume of primary tanks .

Diking (double wall tanks) therefore provides sufficient storage capacity for the largest bulk storage container within the diked area, including tank displacement, and precipitation.

Dispenser & Tanker Unloading Areas – Fleet Fueling & SCG12 Tank Area

Capacity of Largest Tank Truck Compartment = 3,000 gallons

Pump rate estimated at 90 gpm.

Spillage for one minute is 90 gallons.

Spill Box will contain 7 gallons.

Provide for Emergency Secondary Containment via spill kits & other approved measures. Spill kits shall be designed to contain 190 gallons.

Generator Tanker Unloading Areas : (General Secondary Containment)

Capacity of Largest Tank Truck Compartment = 2,000 gallons

Pump rate estimated at 30 gpm.

Spillage for one minute is 30 gallons.

Spill Box will contain 5 gallons or automatic nozzle shutoff provided.

Provide for Emergency Secondary Containment via spill kits & other approved measures. Spill kits shall be design to contain 95 gallons.

Per US EPA Regulations: Title 40: Protection of Environment, PART 112—OIL POLLUTION PREVENTION

112.7 (c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b)... Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing or drip pans;

(iii) Sumps and collection systems;

(iv) Culverting, gutters, or other drainage systems;

(v) Weirs, booms, or other barriers;

(vi) Spill diversion ponds;

(vii) Retention ponds; or

(viii) Sorbent materials.

SEE APPENDIX H FOR LOCATIONS AND OIL SPILL EQUIPMENT MATERIALS ON HAND.

APPENDIX F

Agency Notification Standard Report

Information contained in this report, and any supporting documentation, must be submitted to the US EPA Regional Administrator, within 60 days of the qualifying discharge incident.

Facility:	
Owner/operator:	
Name of person filing report:	
Location:	
Maximum storage capacity:	
Daily throughput:	
Nature of qualifying incident(s):	
Description of facility (attach maps, flow diagrams, and topographical maps):	
Cause of the discharge(s), including a failure analysis of the system and subsystems in which the failure occurred:	
Corrective actions and countermeasures taken, including a description of equipment repairs and replacements:	
Additional preventive measures taken or contemplated to minimize possibility of recurrence:	
Other pertinent information:	

APPENDIX G

Discharge Notification Form

(Fill in ASAP after Spill-See Page 2 for Contact Information)

Part A: Discharge Information				
General information when reporting a spill to outside authorities: Name: Address: Telephone: Owner/Operator: Primary Contact: Work Phone : Cell (24 hrs):				
Type of Oil:	Discharge Date and Time:			
Quantity released:	Discovery Date and Time:			
Quantity released to a waterbody:	Discharge Duration:			
Location/Source:				
Actions taken to stop, remove, and mitigate impacts of the discharge:				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Affected media: air water soil </td> <td style="width: 50%; vertical-align: top;"> storm water sewer/POTW dike/berm/oil-water separator other: </td> </tr> </table>			Affected media: air water soil	storm water sewer/POTW dike/berm/oil-water separator other:
Affected media: air water soil	storm water sewer/POTW dike/berm/oil-water separator other: 			
Notification person:	Telephone contact: Business: 24-hr:			
Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required?				
Part B: Notification Checklist				
Discharge in any amount	Date and time	Name of person receiving call		
Discharge in amount exceeding 10 gallons and <i>not affecting a waterbody or groundwater</i>				
Local Fire Department				
State Agency of Environmental Management				
Discharge in any amount and affecting (or threatening to affect) a waterbody				
Local Fire Department				
State Agency of Environmental Management				
Part B: Notification Checklist	Date and time	Name of person receiving call		
County LEPC				
National Response Center (800) 424-8802				

Other		
-------	--	--

APPENDIX H

Discharge Response Equipment Inventory

The discharge response equipment inventory is verified during the monthly inspection and must be replenished as needed.

Fleet Fueling Facility and Generator Tank SCG011 Area

- ☐ Spill Kits
- ☐ Empty 55-gallons drums to hold contaminated material _____
- ☐ Loose absorbent material _____ pounds
- ☐ Absorbent pads _____ boxes
- ☐ Nitrile gloves _____ pairs
- ☐ Neoprene gloves _____ pairs
- ☐ Vinyl/PVC pull-on overboots _____ pairs
- ☐ Non-sparking shovels _____
- ☐ Brooms _____
- ☐ Drain seals or mats _____
- ☐ Sand bags/Hay Bales/Booms _____

911 Building Generator Tank SCG06

- ☐ Spill Kits
- ☐ Empty 55-gallons drums to hold contaminated material _____
- ☐ Loose absorbent material _____ pounds
- ☐ Absorbent pads _____ box
- ☐ Nitrile gloves _____ pairs
- ☐ Neoprene gloves _____ pairs
- ☐ Vinyl/PVC pull-on overboots _____ pairs
- ☐ Non-sparking shovels _____
- ☐ Brooms _____
- ☐ Drain seals or mats _____
- ☐ Sand Bags/Hay Bales/Booms _____

Detention Center/Stamp Act Drive Generator Tanks SCG09 & SCG12

- ☐ Spill Kits
- ☐ Empty 55-gallons drums to hold contaminated material _____
- ☐ Loose absorbent material _____ pounds
- ☐ Absorbent pads _____ box
- ☐ Nitrile gloves _____ pairs
- ☐ Neoprene gloves _____ pairs
- ☐ Vinyl/PVC pull-on overboots _____ pairs
- ☐ Non-sparking shovels _____
- ☐ Brooms _____
- ☐ Drain seals or mats _____
- ☐ Sand Bags/Hay Bales/Booms _____

Adminstration Building Generator Tank SCG10

- | | |
|---|--------------|
| ☐ Spill Kits | _____ |
| ☐ Empty 55-gallons drums to hold contaminated material | _____ |
| ☐ Loose absorbent material | _____ pounds |
| ☐ Absorbent pads | _____ box |
| ☐ Nitrile gloves | _____ pairs |
| ☐ Neoprene gloves | _____ pairs |
| ☐ Vinyl/PVC pull-on overboots | _____ pairs |
| ☐ Non-sparking shovels | _____ |
| ☐ Brooms | _____ |
| ☐ Drain seals or mats | _____ |
| ☐ Sand Bags/Hay Bales/Booms | _____ |

Active Measures of Secondary Containment

Active measures must be implemented *effectively and in a timely manner to prevent oil from reaching navigable waters and adjoining shorelines*, as required by §112.7(a)(3)(iii) and (c).

Owner shall provide for Emergency Secondary Containment via spill kits & other approved measures. Spill kits shall be design to contain 95-190 gallons at transport unloading and parking areas.

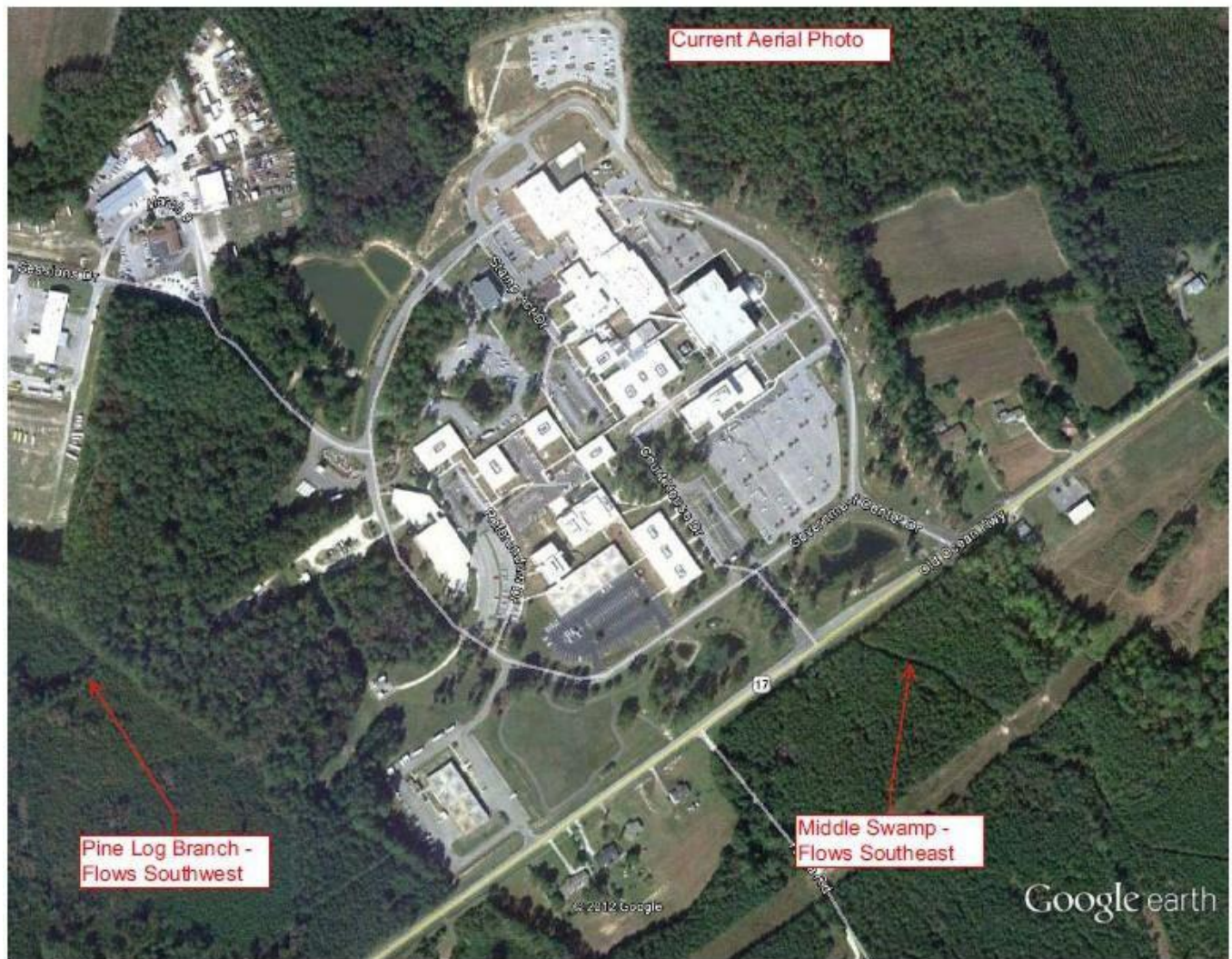
All spill equipment/materials shall be located such that personnel can realistically get to the equipment and deploy it quickly enough to prevent a discharge to navigable waters or adjoining shorelines. The spill materials and equipment must be easily accessible (not locked, key is available), and are they located close enough to the potential source of discharge

Most commercially available spill kits are intended for relatively small volumes (up to approximately 95 gallons of oil). US EPA generally believes that active containment measures can be used to satisfy the general secondary containment requirement when they are capable of containing the most likely discharge volume.

The efficacy of active containment measures to prevent a discharge depends on their technical effectiveness (e.g., mode of operation, absorption rate), placement and quantity, and timely deployment prior to or following a discharge. For discharges that occur only during manned activities, such as those occurring during transfers, an active measure (e.g., sock, mat, other portable barrier, or land-based response capability) may be appropriate, provided that the measure is capable of containing the oil discharge volume and rate, and is timely and properly constructed/deployed. Ideally, in order to further reduce the potential for a discharge to reach navigable waters or adjoining shorelines, the active measure should be deployed prior to initiating the activity with potential for a discharge.

APPENDIX I

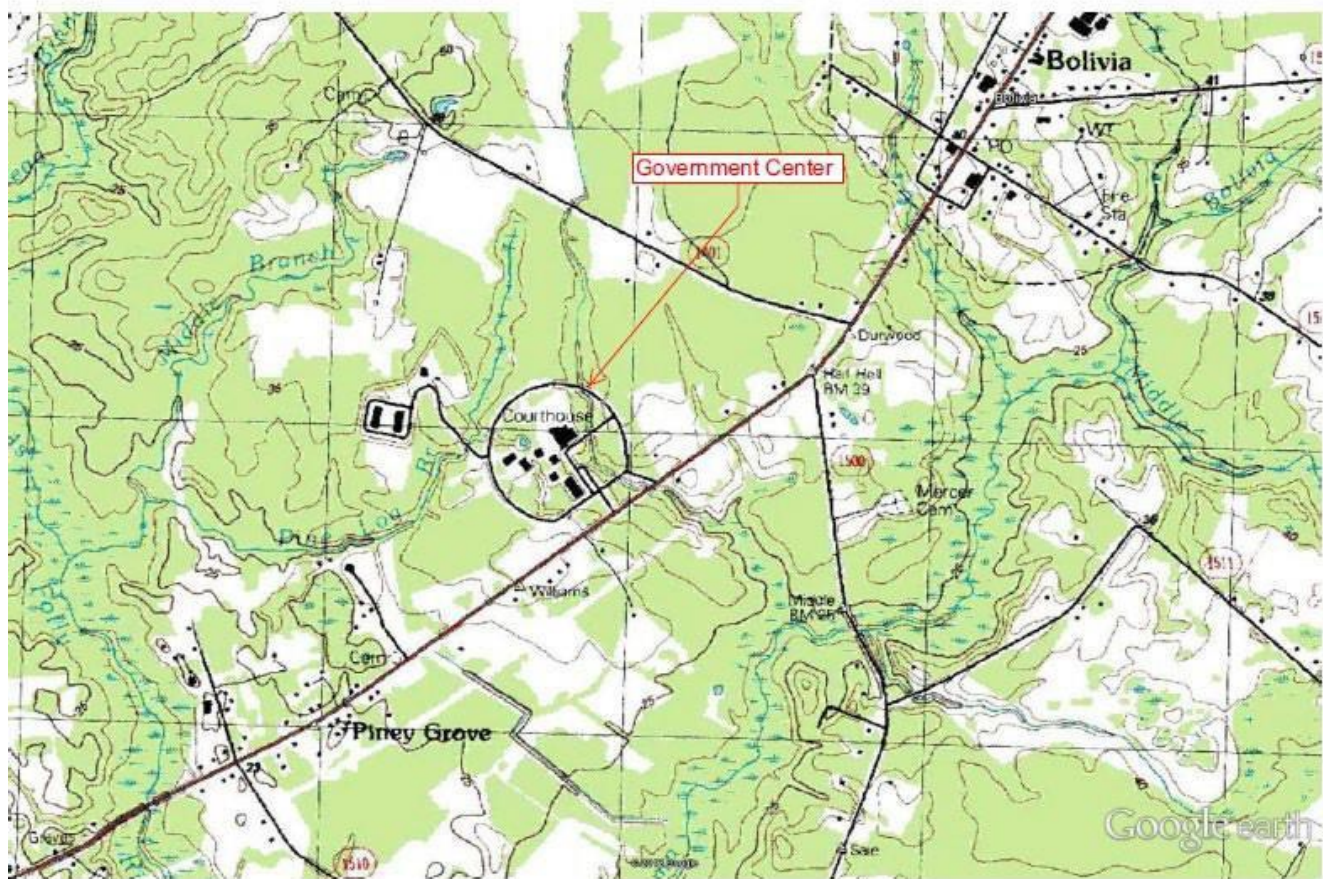
Maps



Google earth



USGS TOPOGRAPHIC MAP



Google earth



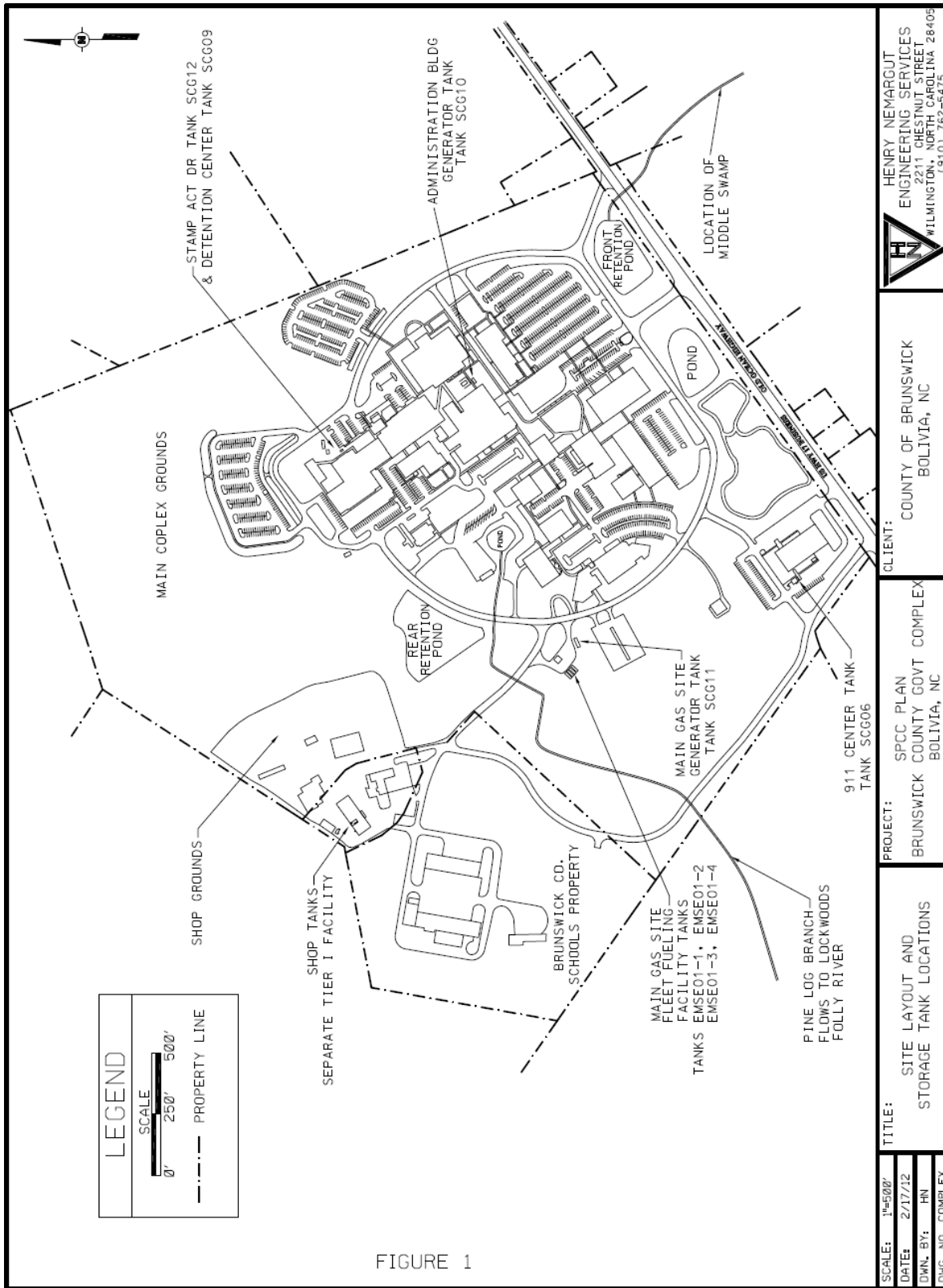
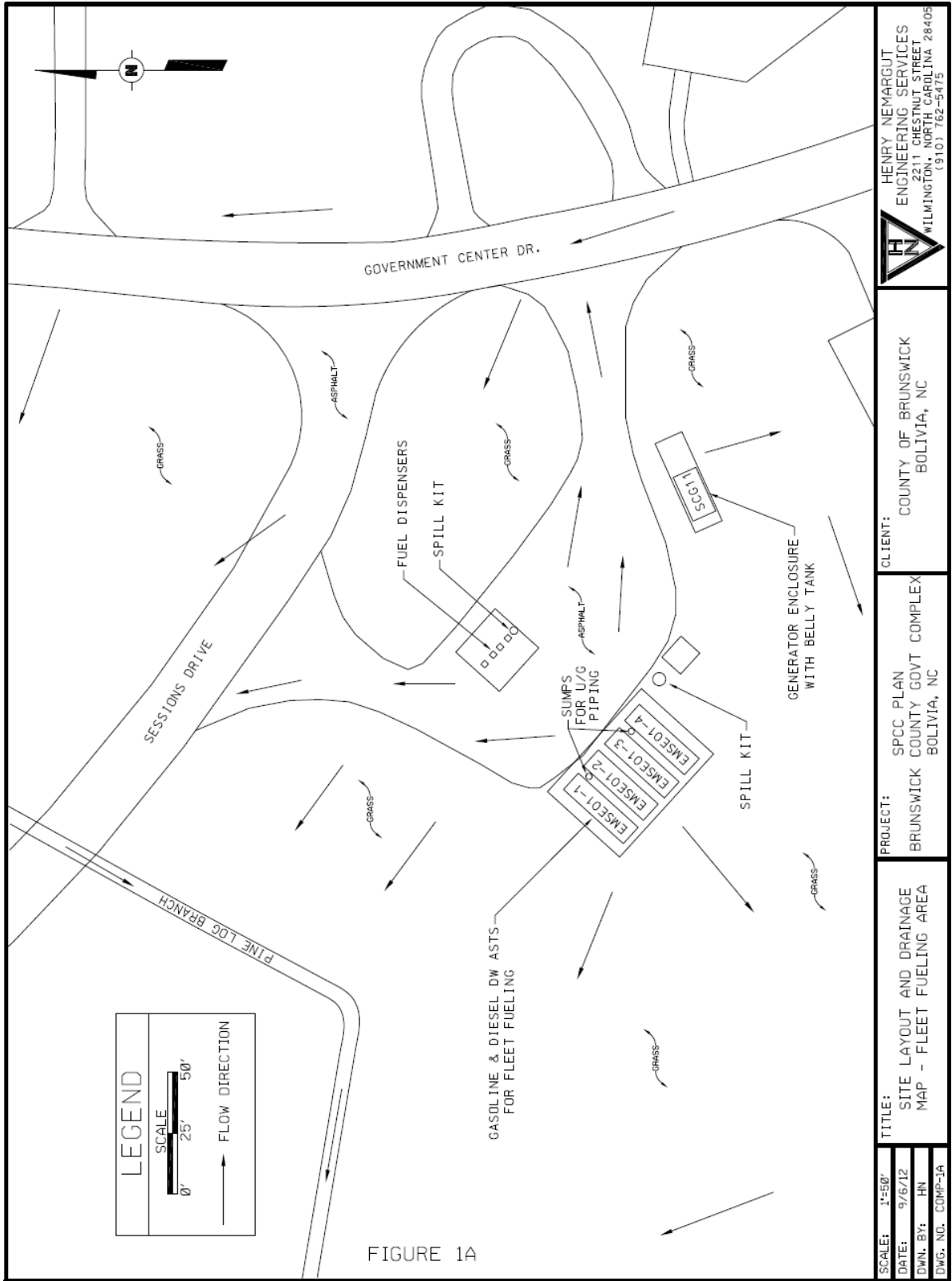
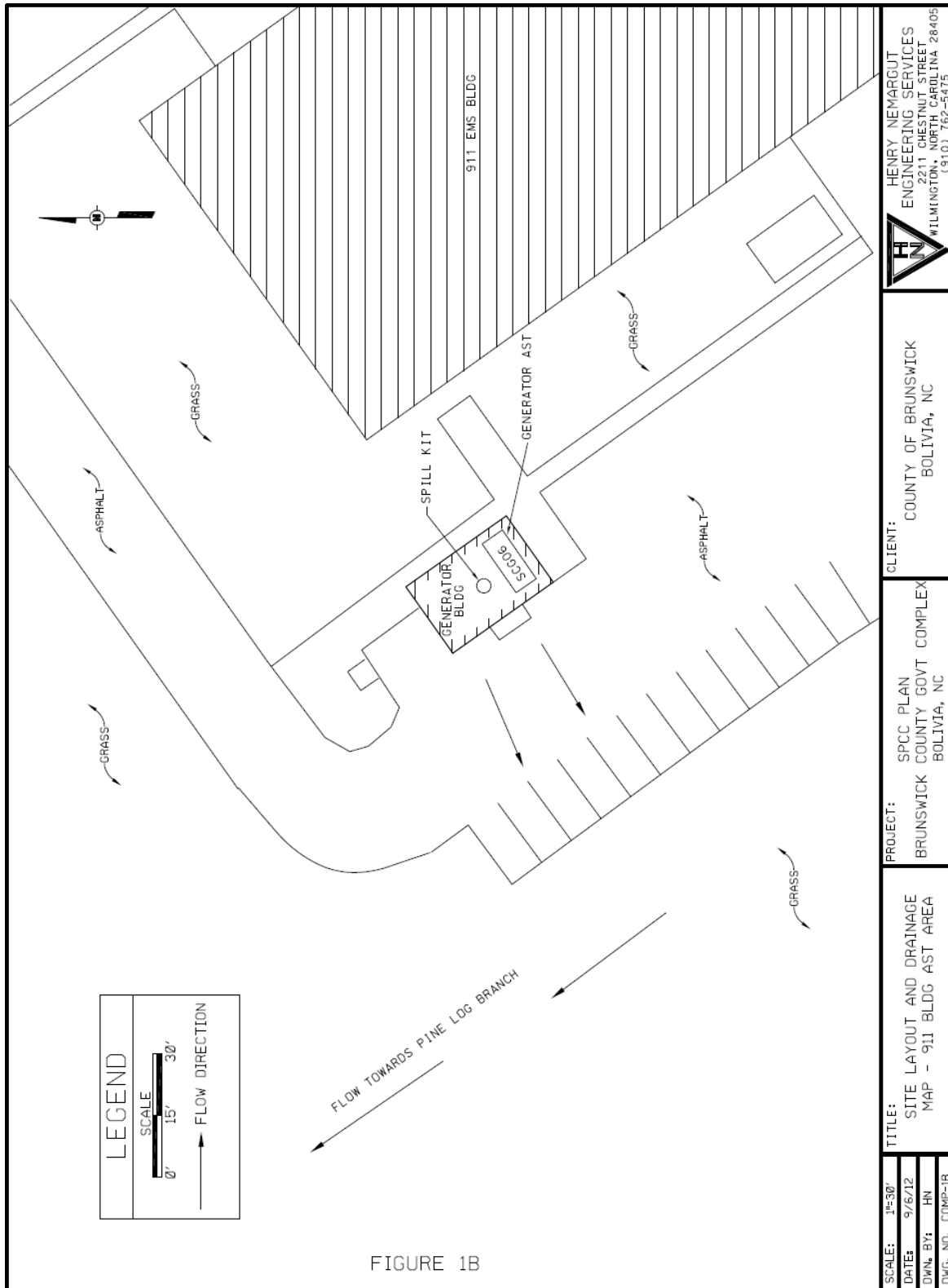
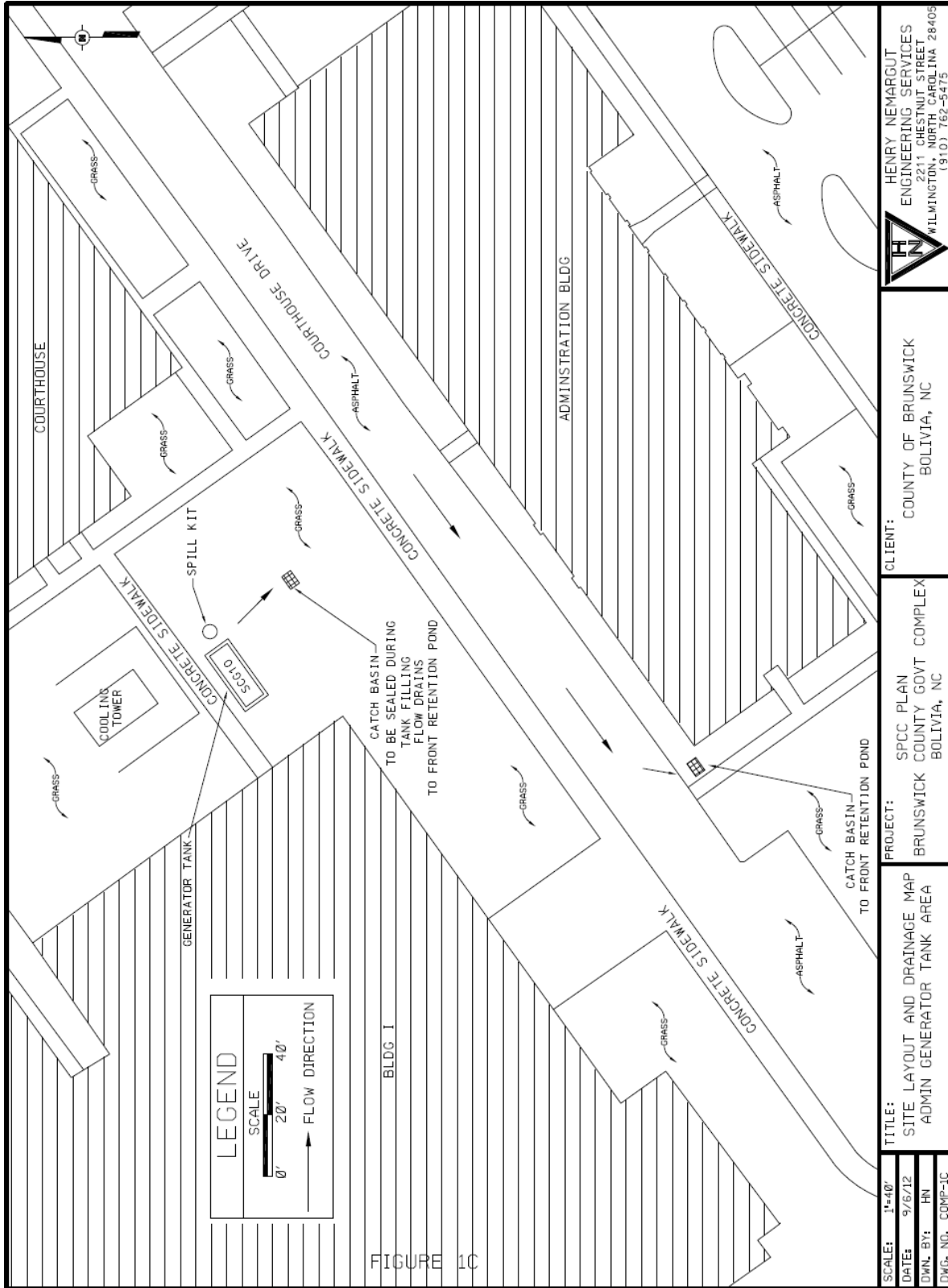


FIGURE 1

SCALE: 1"=500'	TITLE: SITE LAYOUT AND STORAGE TANK LOCATIONS	PROJECT: SPCC PLAN BRUNSWICK COUNTY GOVT COMPLEX BOLIVIA, NC	CLIENT: COUNTY OF BRUNSWICK BOLIVIA, NC	 HENRY NEMARGUT ENGINEERING SERVICES 2211 CHESTNUT STREET WILMINGTON, NORTH CAROLINA 28405 (910) 762-5475
DATE: 2/17/12				
DWN. BY: HN				
DWG. NO. COMPLEX				







SCALE: 1"=40'	TITLE: SITE LAYOUT AND DRAINAGE MAP	PROJECT: SPCC PLAN	CLIENT: COUNTY OF BRUNSWICK	ENGINEERING SERVICES
DATE: 9/6/12	ADMIN GENERATOR TANK AREA	BRUNSWICK COUNTY GOVT COMPLEX	BOLIVIA, NC	2211 CHESTNUT STREET
DWN. BY: HN		BOLIVIA, NC		WILMINGTON, NORTH CAROLINA 28405
DWG. NO. COMP-1C				(910) 762-5475

APPENDIX J

Records of Tank Integrity and Pressure Tests
Attach copies of official records (If Applicable)

APPENDIX

Brunswick County

Safety Inspection Report

The purpose of this report is to help you identify and correct unsafe work practices (acts) and conditions before an accident occurs. A copy of this report must be forwarded to risk management and the responsible director. Directors must follow up in all items needing action.

Floors:

- ◆ In good repair; walking and working surfaces clean & kept clear.
- ◆ Openings closed or covered.
- ◆ Clean, orderly, and free of oil or grease.
- ◆ Nonslip surfaces whenever needed.
- ◆ Grates over floor drains.
- ◆ No rags or papers on floor.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Aisles:

- ◆ Clearly marked.
- ◆ Unobstructed.
- ◆ Sufficiently wide for material handling.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____

Lavatories:

- ◆ Accessible.
- ◆ Toilet & facilities clean & in good repair.
- ◆ Potable water available.

☐	_____
☐	_____
☐	_____

Lighting:

- ◆ Illumination level sufficient for work performed.
- ◆ Emergency lighting adequate and operating.
- ◆ Emergency lighting at all exits.

☐	_____
☐	_____
☐	_____

Stairs:

- ◆ Adequate lighting.
- ◆ Non slips surfaces on stairs.
- ◆ Handrails secured.

☐	_____
☐	_____
☐	_____

Exits & Exitways:

- ◆ Exits not locked or blocked.
- ◆ Exit signs used properly.
- ◆ Illuminated exit signs used.
- ◆ Exitways kept free & clear inside and out.
- ◆ Exit doors open in direction of travel.
- ◆ No storage of flammables or combustibles in exitways.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Employee Work Practices:

- ◆ Dangling jewelry around machine.
- ◆ Proper clothing for work performed.
- ◆ Proper footwear for work performed.

☐	_____
☐	_____
☐	_____

- ◆ Personal protective equipment as needed.
- ◆ Potential for repetitive motion injury.
- ◆ First aid supplies available.

☐
☐
☐

Employee Training:

- ◆ Basic orientation for employees.
- ◆ Employees trained in new or unfamiliar tasks prior to starting tasks.

☐
☐

Record Keeping:

- ◆ Training documentation.
- ◆ OSHA poster.
- ◆ 300 logs
- ◆ WC process posted.
- ◆ MSDS.
- ◆ Medical records (HR only)

☐
☐
☐
☐
☐
☐

Fire Protection:

- ◆ Written fire action plan.
- ◆ Fire drills held regularly.
- ◆ Fire extinguishers checked regularly.
- ◆ Fire extinguishers are of proper type and size.
- ◆ Fire extinguisher locations marked clearly.
- ◆ Storage must be 2 ft below ceiling (nonsprinkled area).
- ◆ Sprinkler heads are clear of obstructions (18”).
- ◆ Employees trained to use fire extinguishers.
- ◆ Welding or Hot Work Permits issued.
- ◆ Flammables kept in safety cans, properly labeled & properly maintained & used.
- ◆ No smoking rules in force & enforced.
- ◆ Unsafe behaviors observed?

☐
☐
☐
☐
☐
☐
☐
☐
☐
☐
☐
☐

Offices:

- ◆ Floors not slippery due to excessive or type of wax.
- ◆ Carpets free of holes, cuts, or tears.
- ◆ Aisles & hallways obstructions.
- ◆ Exits properly lighted.
- ◆ No top-heavy file cabinets (by loading/ open drawers).
- ◆ No smoking rules enforced.
- ◆ Proper fire extinguishers installed.(training provided)
- ◆ All electrical equipment grounded properly.
- ◆ All electrical supply equipment protected from exposure.

☐
☐
☐
☐
☐
☐
☐
☐
☐

Personal Protective Equipment:

- ◆ Any & all required personal protective equipment used when needed.
- ◆ Equipment such as respirators & hearing protectors kept in a clean & sanitary condition.
- ◆ Emergency showers/eye wash kept in good operating condition & clean.
- ◆ Employees properly trained.

☐
☐
☐
☐

Waste Disposal:

- ◆ Special containers provided and used for different types of waste – oily rags, chemicals, scrap, etc.
- ◆ Food waste handled separately.
- ◆ When required, waste properly labeled.
- ◆ Satisfactory external cartage & disposal arrangements
- ◆ Approved disposal arrangements with a certified Hazardous Materials Handler.
- ◆ Good housekeeping practiced.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Ventilation:

- ◆ Adequate ventilation for the process performed.
- ◆ Fans properly guarded and out of reach.
- ◆ Hoods draw air away from people.
- ◆ Hoods properly connected to exhaust system.

☐	_____
☐	_____
☐	_____
☐	_____

Noise Control & Hearing Conservation:

- ◆ Engineering controls applied where feasible.
- ◆ Engineering controls in operations.
- ◆ Administrative controls applied.
- ◆ Hearing protection provided & used where needed.
- ◆ Employees using hearing protection properly.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Lockout-Tagout Program:

- ◆ Being used when required.
- ◆ Authorized employees only doing lockouts.
- ◆ LOTO Program for each machine.
- ◆ All employees trained.
- ◆ Locks unique & identified as to user.
- ◆ Tags identified.
- ◆ All energy sources addressed in lockout.
- ◆ Affected employees kept out of way.
- ◆ Program enforced by management.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Electrical/Portable Tools:

- ◆ Inspected per mfg. Instructions before using.
- ◆ Electrically grounded.
- ◆ Condition of tools & cords observed.
- ◆ Grounding prong in place & working.
- ◆ Constant pressure switches on tools.
- ◆ Proper guards in place & used properly.
- ◆ Strain relief device on power cord at tool.
- ◆ Operator trained properly.
- ◆ Unsafe behaviors observed?

☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____
☐	_____

Machine Tools:

- ◆ Inspected per mfg. Instructions before using.
- ◆ Kept in good operating condition.

☐	_____
☐	_____

- ◆ Guards complete for pinch points, inrunning nips, & points of operation.
- ◆ Eye protection provided & worn.
- ◆ Lockout program available.
- ◆ Emergency stops readily accessible.
- ◆ Operators properly trained.
- ◆ Unsafe behaviors observed?

☐
☐
☐
☐
☐
☐

Machines:

- ◆ Proper guards in place.
- ◆ Guards are effective and unable to be bypassed.
- ◆ Mechanics only persons who remove guards.
- ◆ Mechanics return guards when job is finished.
- ◆ Controls clearly labeled.
- ◆ Controls work as designed.
- ◆ Controls guarded against accidental start up.
- ◆ Emergency stops not clearly identified.
- ◆ Lockout-Tagout used when required.
- ◆ Operators properly trained.
- ◆ Adjusters properly trained.
- ◆ No bypassing guards.
- ◆ Unsafe behaviors observed?

☐
☐
☐
☐
☐
☐
☐
☐
☐
☐
☐
☐
☐

Potentially Hazardous Chemicals:

- ◆ MSDS available for all chemicals used.
- ◆ Written HazCom Program available.
- ◆ Employees trained.
- ◆ Labels on all drums & chemicals.
- ◆ Drums/tanks proper grounded/bonded as needed.
- ◆ Proper personal protective equipment used.
- ◆ Flame arresters in safety cans as needed.
- ◆ Proper storage cabinets as needed.
- ◆ Unsafe behaviors observed?

☐
☐
☐
☐
☐
☐
☐
☐
☐

Ladders, Hoisting, & Lifting Equipment:

- ◆ Proper type equipment for intended use.
- ◆ Rated capacity clearly visible.
- ◆ Full unobstructed view for operator.
- ◆ Limit switches working properly – if used.
- ◆ All foot or hand controls working properly.
- ◆ Operators trained properly.
- ◆ All equipment maintained in good condition.
- ◆ Unsafe behaviors observed?

☐
☐
☐
☐
☐
☐
☐
☐

In-Plant Materials Handling:

- ◆ Dock locks & levers working properly.
- ◆ Stabilizer jacks available for use when needed.
- ◆ Pallets & skids in good repair.
- ◆ Pallets & skids stored properly when not in use.
- ◆ Aisleways kept clear of stored materials.
- ◆ Storage provided for unused pallets & skids.

☐
☐
☐
☐
☐
☐

- ◆ Unsafe behaviors observed? ☐ _____

Compressed Gas Cylinders:

- ◆ Oxygen & fuel gas cylinders stored properly in bulk. ☐ _____
- ◆ Oxygen & fuel gas cylinders separated properly. ☐ _____
- ◆ Oxygen & fuel gas cylinders chained up as needed. ☐ _____
- ◆ All cylinders stored upright with caps in place. ☐ _____
- ◆ All cylinders properly labeled. ☐ _____
- ◆ Employees trained in proper handling. ☐ _____
- ◆ Kept away from open or other high heat sources. ☐ _____
- ◆ Unsafe behaviors observed? ☐ _____

Power Systems – Mechanical:

- ◆ Proper guarding of all nip, points, rotating parts, cams, chucks, couplings, clutches, shafts, flywheels, spindles, bolt ends, keyed shaft ends. ☐ _____
- ◆ Emergency stops fully operational. ☐ _____
- ◆ Employees trained properly. ☐ _____
- ◆ Lockout-Tagout used when required. ☐ _____
- ◆ Unsafe behaviors observed? ☐ _____

Power Systems – Hydraulic:

- ◆ Pressure lines clearly identified. ☐ _____
- ◆ Pressure regulated within limits. ☐ _____
- ◆ Emergency stops fully operational. ☐ _____
- ◆ Employees properly trained in operation. ☐ _____
- ◆ Lockout-Tagout used when required. ☐ _____
- ◆ Unsafe behaviors observed. ☐ _____

Power Systems – Electrical:

- ◆ 30” clearance around electrical panel boxes. ☐ _____
- ◆ All systems properly grounded. ☐ _____
- ◆ Electrical control panels identified. ☐ _____
- ◆ Disconnects identified as required. ☐ _____
- ◆ Any exposed wiring. ☐ _____
- ◆ Employees trained properly. ☐ _____
- ◆ Lockout-Tagout procedures in place. ☐ _____
- ◆ Lockout-Tagout procedures being used. ☐ _____
- ◆ Explosion-proof fixtures where required. ☐ _____
- ◆ Grounding prongs in place on cords. ☐ _____
- ◆ No flex cord used in permanent installations. ☐ _____
- ◆ No spliced extension or other cords. ☐ _____
- ◆ Unsafe behaviors observed? ☐ _____

Industrial Trucks:

- ◆ All operators trained. ☐ _____
- ◆ Inspected before use. ☐ _____
- ◆ Checklist used. ☐ _____
- ◆ Trucks driven at safe speed. ☐ _____
- ◆ Required factory label in place. ☐ _____
- ◆ Overhead guard and backrest extension in place. ☐ _____

- [illegible]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Auditor	Date	Supervisor/Occupant	Date

Outside Storage Area Inspection Form

Location	Inspector	Date	Time
----------	-----------	------	------

	YES	NO	Comments
1. Good housekeeping is evident in area	☐	☐	
2. Aisle kept clear, no tripping hazards in walkways	☐	☐	
3. Motorized equipment stored properly	☐	☐	
4. Storage shelves and racks are secured to prevent accidental tipping	☐	☐	
5. Tanks are stored on racks	☐	☐	
6. Chemicals labeled properly	☐	☐	
7. Overhead storage is safe with fall prevention provided for item stored on upper shelves	☐	☐	
8. Metal parts stored in racks or cabinets	☐	☐	
9. Sheet metal stored in racks or on pallets	☐	☐	
10. Fence gate maintained	☐	☐	
11. Pavement or ground storage surface maintained	☐	☐	
a. Other			

Garage Area Inspection Report

Location	Inspector	Date	Time
	YES NO		Comments
1. Floor maintained clean and dry	☐	☐	
2. Ceiling and walls maintained	☐	☐	
3. Oil spills cleaned up as soon as possible	☐	☐	
4. Absorbent material for oil spills readily available	☐	☐	
5. Work benches maintained clean and orderly	☐	☐	
6. Electrical equipment in shop area has been checked for ground by an electrician	☐	☐	
7. Equipment secured to wall studs or floor	☐	☐	
8. Electrical panels clear for 36" for access	☐	☐	
9. Breakers marked for type and area of service	☐	☐	
10. Electrical extension cords being used	☐	☐	
11. Electrical outlets wired properly	☐	☐	
12. Emergency electrical shut off marked	☐	☐	
13. Ventilation adequate	☐	☐	
14. Lighting adequate	☐	☐	
15. Exit paths clear	☐	☐	
16. Good housekeeping evident in shop area	☐	☐	
17. Combustibles stored in appropriate location	☐	☐	
18. Rotating machinery parts guarded	☐	☐	

19. Brake drum turning equipment being used	☐	☐	_____
20. Brake shoe grinding equipment being used	☐	☐	_____
21. Approved dust collection being used during brake shoe grinding operation	☐	☐	_____
22. Grit or sand blasting equipment being used	☐	☐	_____
23. Blasting safety nozzle switch must be held open by operator and not by mechanical means being used exclusively	☐	☐	_____
24. Storage room maintained in an orderly manner	☐	☐	_____
25. Storage racks secured to wall studs or floor	☐	☐	_____
26. Storage and file cabinets secured to wall studs or floor	☐	☐	_____
27. Overhead storage safe with fall prevention for items stored on upper shelves	☐	☐	_____
28. Tools maintained and properly stored	☐	☐	_____
29. Large stationary shop equipment secured to wall studs, floor or work bench	☐	☐	_____
30. Parts cleaning tank has approved cleaning chemical	☐	☐	_____
31. Air compressor has state operating permit displayed in immediate area	☐	☐	_____
32. Air compressor maintained in clean condition	☐	☐	_____
33. First aid kit available to employees	☐	☐	_____
34. Employee trained in first aid	☐	☐	_____
35. Employee CPR trained	☐	☐	_____
36. Emergency telephone number posted	☐	☐	_____
37. Fire extinguisher accessible with current inspection	☐	☐	_____
38. Employee trained to use fire extinguishers	☐	☐	_____
39. Fire alarm location marked & maintained	☐	☐	_____
40. Fire alarm works	☐	☐	_____
41. Security alarm system installed for site	☐	☐	_____

42. Alarms to police or security office ☐ ☐ _____
43. Disaster preparedness plan posted ☐ ☐ _____
44. Employee trained in duties for the event of disaster situation ☐ ☐ _____
45. Other _____

Items Photographed

Report received by: _____

Abate within 10 days _____ Review date: _____

Abate within 60 days _____ Review date: _____

USE THIS SPACE FOR DIAGRAMS IF NECESSARY

Inspection Report Fuel Tank Dispensing Area

Location	Inspector	Date	Time
	YES NO	Comments	
1. Blacktop maintained	☐ ☐	_____	
2. Concrete maintained	☐ ☐	_____	
3. No tripping hazards	☐ ☐	_____	
4. Dirt or water hazard on pavement	☐ ☐	_____	
5. Free of debris	☐ ☐	_____	
6. Trash containers emptied daily	☐ ☐	_____	
7. Warning signs posted	☐ ☐	_____	
8. Posts maintained	☐ ☐	_____	
9. Fencing maintained	☐ ☐	_____	
10. Gates maintained	☐ ☐	_____	
11. Lighting adequate	☐ ☐	_____	
12. Fuel tank in compliance with state of North Carolina requirements	☐ ☐	_____	
13. Permits posted to operate facility posted	☐ ☐	_____	
14. Disaster preparedness plan posted	☐ ☐	_____	
15. Employees trained in duties for the event of a disaster	☐ ☐	_____	
16. Portable generator for emergency electrical power available with proper connections for fuel dispensing pump	☐ ☐	_____	
17. Fire alarm activator marked & maintained	☐ ☐	_____	
18. Fire extinguisher accessible with current inspection	☐ ☐	_____	

- | | | | |
|---|--------------------------|--------------------------|-------|
| 19. Employee trained to use fire extinguishers | ☐ | ☐ | _____ |
| 20. Automated fire extinguishing system installed at fuel dispensing area | ☐ | ☐ | _____ |
| 21. Leak monitoring system maintained | ☐ | ☐ | _____ |
| 22. Employee trained on how to report leak | ☐ | ☐ | _____ |
| 23. Inspection record of system maintained | ☐ | ☐ | _____ |
| 24. Parking areas marked | ☐ | ☐ | _____ |
| 25. Other _____ | | | _____ |

Items Photographed

Report received by: _____

Abate within 10 days _____ Review date: _____

-

Abate within 60 days _____ Review date: _____

Inspection Report Welding Shop Area

Location	Inspector		Date	Time
	YES	NO	Comments	
1. Floor maintained clean and dry	☐	☐		
2. Work stations clean	☐	☐		
3. Electrical shop equipment grounded	☐	☐		
4. Equipment fully secured to wall studs, floor or benches	☐	☐		
5. Rotating parts of equipment properly guarded	☐	☐		
6. Electrical panels clear for 36" for access	☐	☐		
7. Breakers marked for type and area of service	☐	☐		
8. Electrical outlets wired properly	☐	☐		
9. Emergency electrical shop equipment area shut off switch labeled	☐	☐		
10. Electrical extension cords being used	☐	☐		
11. Ventilation adequate for shop and work area	☐	☐		
12. Exhaust fans adequate to remove vapors and fumes from welding area with air flow at least 100 linear foot per minute	☐	☐		
13. Good housekeeping at work stations evident	☐	☐		
14. Combustibles stored in proper location	☐	☐		
15. Fire extinguisher available in area with current inspection	☐	☐		
16. Employee trained to use fire extinguishers	☐	☐		
17. Fire alarm activator marked maintained	☐	☐		
18. Fire alarm works	☐	☐		

19. Storage racks secured to wall studs or floor	☐	☐	_____
20. Storage cabinets secured to wall studs or floor	☐	☐	_____
21. Tools properly stored as to not present a hazardous condition	☐	☐	_____
22. Stationary shop equipment secured to walls studs, floor or benches	☐	☐	_____
23. Oxygen piping high has pressure relief system at outlet	☐	☐	_____
24. Joints threaded or flanged	☐	☐	_____
25. Pipe material is:			
a black steel			_____
b wrought iron			_____
c copper			_____
26. Acetylene piping is steel or wrought iron only	☐	☐	_____
27. Lines clearly marked	☐	☐	_____
28. Oxygen lines painted green (preferred)	☐	☐	_____
29. Other lines painted a distinctive color	☐	☐	_____
30. Color identification chart posted at termination of each line/valve	☐	☐	_____
31. All valves labeled	☐	☐	_____
32. Emergency shut off provided and location clearly marked	☐	☐	_____
33. Manifold system protected or area fenced	☐	☐	_____
34. Each cylinder has a backflow check valve	☐	☐	_____
35. Aggregate capacity does not exceed 3,000 cu ft of gas entering building at any time	☐	☐	_____
36. Bottles are in maintained vertical position	☐	☐	_____
37. Acetylene cylinders coupled have flash arrestors between each cylinder and coupler block	☐	☐	_____
38. Fuel gas and oxygen manifolds have signs on each bearing the name of substance contained with 1" high letters and signs permanently attached to them	☐	☐	_____
39. Arc welding area enclosed for low reflectivity	☐	☐	_____

40. Air flow maintained at floor level	☐	☐	_____
41. Proper safety gear and protection provided	☐	☐	_____
42. Safety signs posted	☐	☐	_____
43. Gas bottle cart has bottles secured	☐	☐	_____
44. Oxygen regulators are marked "USE NO OIL"	☐	☐	_____
45. Spare cylinder bottles stored separately by contents	☐	☐	_____
46. Empty bottle storage in separate area by contents	☐	☐	_____
47. Torches have back flow safety devices	☐	☐	_____
48. Hazardous materials labeled and stored properly	☐	☐	_____
49. Hazardous materials spill clean up kit available	☐	☐	_____
50. Employee trained to use clean up kit	☐	☐	_____
51. Approved storage cabinets being used for all chemical or flammable substances	☐	☐	_____
52. Employee Hazardous Material Training Program in effect and documented	☐	☐	_____
53. Hazardous material disposal plan in effect and records documented	☐	☐	_____
54. Material Data Safety Sheets available to employees on site	☐	☐	_____
55. Inventory of materials available to employees on site	☐	☐	_____
56. Hazardous waste containers marked for contents	☐	☐	_____
57. Parts cleaning tank has approved chemical and is properly vented	☐	☐	_____
58. Caustic tank being used for cleaning parts	☐	☐	_____
59. Caustic tank secured and equipped with mechanical exhaust system	☐	☐	_____
60. First aid kit available in immediate area	☐	☐	_____
61. Employee trained in first aid	☐	☐	_____
62. Employee CPR trained	☐	☐	_____
63. Emergency telephone number posted	☐	☐	_____

64. Disaster preparedness plan posted ☐ ☐ _____
65. Employee trained in duties for the event of a disaster ☐ ☐ _____
66. Room has security alarm system ☐ ☐ _____
67. Alarm to police or security office ☐ ☐ _____
68. Other _____

Items Photographed

Report received by: _____.

Abate within 10 days _____ Review date: _____

Abate within 60 days _____ Review date: _____

Brunswick County Lockout/Tagout Periodic Inspection Form

Department: Public Utilities, Wastewater Treatment

Facility: West Brunswick Regional WWTP

Date of Inspection: _____

Equipment Procedure Reviewed: _____

Name of Employee(s) being Reviewed: _____

	YES	NO
1. Are the steps in the energy control procedure being followed? (If no, provide a detailed description of the problem below.)		
2. Do the involved employees understand their responsibilities under the procedure? (If no, provide a detailed description of the problem and any corrective action needed below.)		
3. Are there any inadequacies in any employee's knowledge, abilities, or use of the procedures? (If yes, provide a detailed description of the problem and any corrective actions below.)		
4. Is the procedure adequate to provide the necessary protection? (If no, provide a detailed description of the problem and corrective action below.)		

Corrective Action- Use the space provided below to describe any problems identified during the inspection, along with a description of any corrective action needed. Appropriate action must be taken to ensure that the deficiencies are corrected. This may involve making changes to the procedure, retraining to employees, and/or taking additional steps to ensure compliance.

Person Conducting Inspection: _____

Name (Print)

Title: _____ Signature: _____

Hazardous Energy Control Procedure for:

Department: Public Utilities, Wastewater Treatment

Equipment: ATAD Recirculation/Transfer/Foam Pump(s) (ATAD 1&2, SDNR Tank)

Equipment Manufacturer and Serial Number: Thermal Process Systems, Inc.

Contact Person: Plant Supervision

Authorized Employee(s): As Defined in Lockout/Tagout Procedures

Purpose: This procedure establishes minimum requirements for the lockout of the ATAD recirculation pump whenever maintenance or service work is performed. The procedure is used to ensure that the machine is stopped, isolated from all potential hazardous energy sources, and locked out before employees perform any servicing or maintenance.

Notify all affected employees before this lockout procedure is used.

Hazardous Energy		Lockout Steps	Verification Steps	Return to Service Steps
Type	Magnitude			
Electrical	480 volts	• Turn the HOA switch to the OFF position to deenergize the pump. • Place the main service disconnect in the OFF position. • Lockout/Tagout the service disconnect using an interlocking hasp and padlock.	• Switch the HOA control to the Hand position. Observe that the pump is not operational. • Return the HOA control to the OFF position. - or • Test for no voltage, phase-to-phase and phase-to-ground.	• Ensure pump components are back in place. • Check the area to ensure tools and nonessential items have been removed. • Verify all employees are not in the hazard area. • Remove the padlock and hasp from the main isolator disconnect and return to the Hand or Auto position.
Hydraulic	0-15 PSI	• Close and lock the pump suction and discharge valves. • Lockout/tagout the valves using a chain, interlocking hasp, and padlock.	• Observe that the flow of liquid ceases. • If applicable bleed off residual liquid pressure.	• Remove the chain, interlocking hasp, and padlock. • Rotate the suction and discharge valves to the OPEN position.

Notify all affected employees that the maintenance is complete and the machine is available for use.

Hazardous Energy Control Procedure for:

Department: Public Utilities, Wastewater Treatment **Equipment:**

ATAD Recirculation/Foam Pumps (ATAD 3&4) **Equipment**

manufacturer and serial number: Thermal Process INC. **Contact**

person: Plant Supervision

Authorized employee(s): As defined in Lock Out/Tag Out Procedures

Purpose: This procedure establishes minimum requirements for the lockout of the ATAD recirculation pump whenever maintenance or service work is performed. The procedure is used to ensure that the machine is stopped, isolated from all potential hazardous energy sources, and locked out before employees perform any servicing or maintenance.

Notify all affected employees before this lockout procedure is used.

Hazardous energy		Lockout steps	Verification steps	Return to service steps
Type	Magnitude			
Electrical	480 volts	- Turn the HOA switch to the OFF position to de-energize the pump. - Place the main service disconnect in the OFF position. - Lockout/Tag out the service disconnect using an interlocking hasp and padlock - Shut off and Lockout/Tag out local disconnect with interlocking hasp and padlock	- Switch the HOA control to the Hand position. Observe that the pump is not operational. - Return the HOA control to the OFF position. or - Test for no voltage, phase-to-phase and phase-to-ground.	- Ensure pump components are back in place. - Check the area to ensure tools and nonessential items have been removed. - Verify all employees are not in the hazard area. - Remove the padlock and hasp from the main isolator disconnect and local disconnect and return to the Hand or Auto position.
Hydraulic	0-20 PSI	- Close and lock the pump suction and discharge valves. - Lockout/Tagout the valves using a chain, interlocking hasp, and padlock.	- Observe that the flow of liquid ceases. - If applicable bleed off residual liquid pressure.	- Remove the chain, interlocking hasp and padlock. - Rotate the suction and discharge valves to the OPEN position.

Notify all affected employees that the maintenance is complete and the machine is available for use.

Brunswick County Lockout/ Tagout Sign In Sheet

Facility Location:	West Brunswick Regional WWTP
--------------------	------------------------------

Initiated					Equipment Description	Released				
Operation	Maintenance/I&E		Time	Date		Operation	Maintenance/I&E		Time	Date

PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT

Location _____ Dept. _____ Job _____

Supervisor _____ Date _____

Eye and Face

Is there danger from:

	No	Yes	E, G	(Eliminated, Guarded, PPE) List Specific PPE
1) Flying Particles	☐	☐	☐	_____
2) Molten Metal	☐	☐	☐	_____
3) Liquid Chemicals	☐	☐	☐	_____
4) Acids	☐	☐	☐	_____
5) Caustic Liquids	☐	☐	☐	_____
6) Chemical Gases or Vapors	☐	☐	☐	_____
7) Light Radiation	☐	☐	☐	_____
8) Other	☐	☐	☐	_____

Head

Is there danger from:

	No	Yes	E, G	List Specific PPE
1) Falling or Flying Objects	☐	☐	☐	_____
2) Work Being Performed Overhead	☐	☐	☐	_____
3) Elevated Conveyors	☐	☐	☐	_____
4) Striking Against a Fixed Object	☐	☐	☐	_____
5) Forklift Hazards	☐	☐	☐	_____
6) Exposed Electrical Conductors	☐	☐	☐	_____
7) Other	☐	☐	☐	_____

Miscellaneous

Is there danger from:

	No	Yes	E, G	List Specific PPE
1) Lifting	☐	☐	☐	_____
2) Blood-borne Pathogens	☐	☐	☐	_____

Foot

Is there danger from:

	No	Yes	E, G	(Eliminated, Guarded, PPE) List Specific PPE
1) Falling and Rolling Objects	☐	☐	☐	_____
2) Objects Piercing the Sole	☐	☐	☐	_____
3) Electrical Hazards	☐	☐	☐	_____
4) Wet or Slippery Surfaces	☐	☐	☐	_____
5) Chemical Exposure	☐	☐	☐	_____
6) Environmental	☐	☐	☐	_____
7) Other	☐	☐	☐	_____

Hand

Is there danger from:

	No	Yes	E, G	List Specific PPE
1) Skin Absorption	☐	☐	☐	_____
2) Cuts or Lacerations	☐	☐	☐	_____
3) Abrasions	☐	☐	☐	_____
4) Punctures	☐	☐	☐	_____
5) Chemical Burns	☐	☐	☐	_____
6) Thermal Burns	☐	☐	☐	_____
7) Harmful Temperature Extremes	☐	☐	☐	_____
8) Other	☐	☐	☐	_____

Respiratory

Has the workplace area been evaluated for:

	No	Yes	E, G	List Specific PPE
1) Harmful Dusts	☐	☐	☐	_____
2) Fogs	☐	☐	☐	_____
3) Fumes	☐	☐	☐	_____
4) Mists	☐	☐	☐	_____
5) Smokes	☐	☐	☐	_____
6) Sprays	☐	☐	☐	_____
7) Vapors	☐	☐	☐	_____
8) Other	☐	☐	☐	_____

Torso

Are employees bodies protected from:

	No	Yes	E, G	(Eliminated, Guarded, PPE) List Specific PPE
1) Hot Metals	☐	☐	☐	_____

2) Cuts	☐	☐	☐	_____
3) Acids	☐	☐	☐	_____
4) Radiation	☐	☐	☐	_____

Comments:

Certification

This hazard assessment has been performed to determine the required type of PPE for each affected employee. The assessment includes:

- Walk-through survey
- Specific job analysis
- Review of accident statistics
- Review of safety equipment selection guideline materials
- Selection of appropriate required PPE

Assessment Performed by (Supervisor) _____

Date _____

Instructor Name _____
Date _____

The following employees have received training on specific PPE and have demonstrated an understanding of the PPE.

Attendance List

[illegible]

**COUNTY OF BRUNSWICK
RESPIRATORY PROTECTION PROGRAM**

Table 1 from 29 CFR 1910.134

Atmospheric contaminants	Colors assigned
Acid gases	White
Hydrocyanic acid gas	White with ½ inch green stripe completely around the canister near the bottom
Chlorine gas	White with ½ inch yellow stripe completely around the canister near the bottom
Organic vapors	Black
Ammonia gas	Green
Acid gases and ammonia gas	Green with ½ inch white stripe completely around the canister near the bottom
Carbon monoxide	Blue
Acid gases and organic vapors	Yellow
Hydrocyanic acid gas and chloropicrin vapor	Yellow with ½ inch blue strip completely around the canister near the bottom.
Acid gases, organic vapors	Brown and ammonia gases
Radioactive materials, excepting tritium and noble gases.	Purple (Magenta).
Particulates (dusts, fumes, mists, fogs, or smokes) in combination with any of the gases or vapors	Canister color for contaminant as designed above with ½ inch gray stripe completely around the canister near the top
All of the above atmospheric	Red with ½ gray stripe completely around the contaminants canister near the top

Note: Gray is not assigned as the main color for a canister designed to remove acids or vapors.

Note: Orange is used as a complete body, or stripe color to represent gases not included in this table. The user will need to refer to the canister label to determine the degree of protection the canister will afford.

**COUNTY OF BRUNSWICK
RESPIRATORY PROTECTION PROGRAM**

ATTACHMENT 1

RESPIRATOR FIT TEST RECORD

A. Employee: _____ Date _____
Employee Number: _____
Employee Job Title/Description: _____

B. Employer: COUNTY OF BRUNSWICK
Location/Address: _____
Physical Address: _____

C. Respirator Selected: _____
Manufacturer: _____
NIOSH Approval No: _____
Model Number: _____

D. Conditions which could affect Respirator Fit:

☐	Clean Shaven	☐	Facial Scar
☐	1-2 Day Beard Growth	☐	Dentures Absent
☐	2+ Day growth	☐	Glasses
☐	Mustache	☐	None

Comments: _____

E. Fit Checks

Negative Pressure:	☐ Pass	☐ Fail	☐ Not Done
Positive Pressure:	☐ Pass	☐ Fail	☐ Not Done

F. Fit Testing

☐ Quantitative	Fit Factor: _____
☐ Qualitative	
☐ Irritant Smoke	☐ Pass ☐ Fail
☐ Saccharin Vapor (3M FT-10/FT-10S)	☐ Pass ☐ Fail

Comments: _____

G. Employee Acknowledgment of Test Results:

Employee Signature: _____ Date: _____

Test Conducted By: _____ Date: _____

**COUNTY OF BRUNSWICK
RESPIRATORY PROTECTION PROGRAM**

DISCLAIMER

The above respirator fit test was performed on and by the persons listed. The results indicate the performance of the listed respiratory protective device, as fitted on the Employee named on this record under controlled conditions. Fit Testing, as performed, measures the ability of the respiratory protective device to provide protection to the individual tested. The County of Brunswick or the test conductor express or imply no guarantee that this or an identical respiratory protective device will provide adequate protection under conditions other than were present when this test was performed. Improper use, maintenance or application of this or any other respiratory protective device will reduce or eliminate protection.

**COUNTY OF BRUNSWICK
RESPIRATORY PROTECTION PROGRAM**

ATTACHMENT 2

**SELF-CONTAINED BREATHING APPARATUS (SCBA)
INSPECTION REPORT FORM**

COUNTY Name: _____
 Manufacturer: _____
 Regulator S/N: _____
 Locator: _____
 Asset Number: _____

Model No.: _____
 Reducer S/N: _____

	A) After Each Use Inspection	Checked	Comments
	B) Monthly Inspection		
1.	Visually inspect the complete apparatus for worn or aging rubber parts or damaged components.		
2.	Check the latest cylinder hydrostatic test date stamped on the neck of the cylinder to ensure it is current, within three (3) years for lightweight 2216 cylinders.		
3.	Be sure high pressure nipple seal is properly installed and in good condition.		
4.	Visually inspect cylinder for large dents/gouges in metal and cut fiberglass wrapping on 2216 psig and 4500 psig systems. Cylinders which show exposure to high heat/flame, such as paint turned brown or black, decals charred or missing, gauge lens melted or elastomeric bumper distorted, shall be removed from service and re-tested prior to recharging.		
5.	Check cylinder pressure gauge for "Full" indication. If cylinder pressure is below (less than) "Full" replace with fully charged cylinder. Have cylinder refilled.		
6.	Check to ensure high pressure gauge hose coupling is tightened to the cylinder valveoutlet. Note: Wrenches should not be used, as this connection should be hand-tightened.		
7.	Make sure low pressure hose from mask-mounted regulator is connected to pressure reducer & tightened securely.		
8.	Close purge valve located on mask-mounted regulator (full clockwise & pointer on knob upward).		
9.	Check to ensure red gasket is present between facepiece & mask-mounted regulator & is not damaged.		
10.	Hold facepiece to face or don facepiece; slowly rotate cylinder valve counterclockwise to full open position. The end of service indicator (Vibralert) should sound momentarily. The remote gauge should indicate "Full". On positive pressure models hold breath momentarily; no flow shall be audible through the mask-mounted regulator.		
11.	Breath normally. Air should be delivered with very slight effort. Resistance on exhalation should be minimal.		
12.	Rotate purge knob full open. A constant flow of air into the facepiece should be noted. Close the purge		

knob.		
13. While removing facepiece from face, depress donning switch on top of regulator as worn. No flow of air should be audible.		
14. Replace facepiece to face Y seal. Normal air flow should resume with slight inhalations.		
15. Push in & rotate cylinder valve knob clockwise to close valve.		
16. Slowly release residual air pressure by breathing slowly. The end of service indicator should sound momentarily.		
17. Thoroughly cleaned and sanitized facepiece prior to returning.		
18. Inspector signed and dated inspection report.		
19. Returned apparatus to its proper storage location.		

NOTE: If the end of service indicator fails to operate after test, remove the apparatus from service and tag out “*For Repair – DO NOT USE!*”

WARNING: If any discrepancies are found using any of these procedures, the apparatus shall be removed from service, tagged out “*For Repair – DO NOT USE!*”, and repaired by authorized personnel only before returning to service.

Name: _____ Signature: _____ Date: _____

DRIVER'S VEHICLE INSPECTION REPORT
AS REQUIRED BY THE D.O.T. FEDERAL MOTOR CARRIER SAFETY REGULATIONS

CARRIER: _____

ADDRESS: _____

DATE: _____ TIME: _____ ☐ A.M. ☐ P.M.

CHECK ANY DEFECTIVE ITEM AND GIVE DETAILS UNDER "REMARKS"

TRACTOR/TRUCK NO. _____ ODOMETER READING _____

- | | | |
|---|---|--|
| ☐ Air Compressor | ☐ Front Axle | ☐ Reflective Triangles |
| ☐ Air Lines | ☐ Fuel Tanks | ☐ Spare Bulbs and Fuses |
| ☐ Battery | ☐ Horn | ☐ Spare Seal Beam |
| ☐ Belts and Hoses | ☐ Lights | ☐ Starter |
| ☐ Body | ☐ Head – Stop | ☐ Steering |
| ☐ Brake Accessories | ☐ Tail - Dash | ☐ Suspension System |
| ☐ Brakes, Parking | ☐ Turn Indicators | ☐ Tire Chains |
| ☐ Clutch | ☐ Mirrors | ☐ Tires |
| ☐ Coupling Devices | ☐ Muffler | ☐ Transmission |
| ☐ Defroster/Heater | ☐ Oil Pressure | ☐ Trip Recorder |
| ☐ Drive Line | ☐ Radiator | ☐ Wheels and Rims |
| ☐ Engine | ☐ Rear End | ☐ Windows |
| ☐ Exhaust | ☐ Reflectors | ☐ Windshield Wipers |
| ☐ Fifth Wheel | ☐ Safety Equipment | ☐ Other |
| ☐ Fluid Levels | ☐ Fire Extinguisher | |
| ☐ Frame and Assembly | ☐ Flags - Flares - Fuses | |

TRAILER(S) NO.(S) _____

- | | | |
|--|---|--|
| ☐ Brake Connections | ☐ Hitch | ☐ Suspension System |
| ☐ Brakes | ☐ Landing Gear | ☐ Tarpaulin |
| ☐ Coupling Devices | ☐ Lights - All | ☐ Tires |
| ☐ Coupling (King) Pin | ☐ Reflectors/Reflective Tape | ☐ Wheels and Rims |
| ☐ Doors | ☐ Roof | ☐ Other |

Remarks: _____

☐ CONDITION OF THE ABOVE VEHICLE IS SATISFACTORY

DRIVER'S SIGNATURE: _____

☐ ABOVE DEFECTS CORRECTED

☐ ABOVE DEFECTS NEED NOT BE CORRECTED FOR SAFE OPERATION OF VEHICLE

MECHANIC'S SIGNATURE: _____ DATE _____

DRIVER'S SIGNATURE:_____

DATE_____