

CHAPTER 153: HAZARDOUS MATERIALS CONTAINMENT

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For provisions concerning hazardous waste emergency situations, see also the [Emergency Planning and Community Right-to-Know Act of 1986](#); Title III of the Superfund Amendments and Reauthorization Act of 1986; [state Executive Order 242, state Emergency Response Commission](#); N.C.G.S. Chapter 166A; [DOT Emergency Response Guidebook 2020 edition \(DOT P 5800.4\)](#); [Hazardous Materials Emergency Planning Guide, NRT-1, 2001](#); [Guide for Development of State and Local Emergency Operations Plans, CPG 101, 2010](#); and the state Occupational Safety and Health, Hazardous Waste Operations and Emergency Response Standard ([13 NCAC 7c.0101\(a\)\(26\)](#)); [NC Fire Prevention Code, 2018, Chapter 50](#); OSHA 1910.120; OSHA 1910.134

GENERAL PROVISIONS

153.01 PURPOSE

The state Water Supply Watershed Protection Act, [N.C.G.S 143-214.5](#), requires all local governments to prepare and adopt a hazardous materials inventory and spill containment plan in order to adequately respond to hazardous materials incidents that may occur within water supply watersheds. The plan is intended to serve as a guide to county staff and other agencies in the event a hazardous material spill occurs within the county's jurisdictions in the Catawba River, South Yadkin, Lake Norman and Wateree watersheds. This plan is designed to be used in conjunction with the Alexander County Emergency Operations Plan (version 2022) and standard operating procedures and guidelines of the county.

153.02 HAZARDOUS MATERIAL INVENTORY

(A) Facilities reporting hazardous material, as required by [Article 18, Hazardous Chemicals Right-to-Know Act, N.C.G.S. 95-173](#) *et seq.*, located within the county are to be listed in Appendix F-A.

(B) Hazardous materials or substances are defined in [N.C.G.S.143-215.77\(5-5a\)](#) or as any substance listed as such in the Superfund Amendments and Reauthorization Act (SARA) [Section 302 Extremely Hazardous Substances](#) (42 U.S.C. 11000 *et seq.*); Comprehensive Environmental Response, [Section 311 of the Clean Water Act](#) (CWA), as amended, concerning oil and hazardous substances ([33 U.S.C. 1251](#) *et seq.*); all of which are hereby incorporated by reference including any subsequent amendments and editions.

(C) Upon request from the local fire official, a facility must also prepare and submit Safety Data Sheet(s).

153.03 *TRANSPORTATION ROUTES IN THE WATERSHED*

The major transportation network within the Alexander County watershed consists of U.S. Highway 64, NC Highway 90, NC Highway 127 and the rail line operated by Alexander Railroad Inc. NC Highway 16 is another major transportation route within the County but is not located within a watershed.

153.04 *ON-SITE CONTAINMENT STRUCTURES*

(A) Volume 30 of the National Fire Protection Association and Part V of the NC Fire Prevention Code Chapters 50-68 provides the specification for on-site containment structures for both new and existing businesses and industries.

(B) The Alexander County Planning and Inspections Department reviews building plans, along with the Alexander County Fire Marshal, for new construction where hazardous material containment structures are required. These offices also conducts annual inspections of hazardous material facilities. Existing facilities are required to meet the requirements of the regulations that were in place at the time of the facility's construction ant to meet the current regulations where life safety hazards exist.

HAZARDOUS MATERIAL CONTAINMENT OPERATIONS

153.15 *PURPOSE*

This subchapter provides additional information to the multi-hazard plan to effectively and expeditiously respond to hazardous material emergencies and to meet this jurisdiction's responsibilities pursuant to the Emergency Planning and Community Right-to-Know Act of 1986 (Title III), Superfund Amendments and Reauthorization Act of 1986 (SARA).

153.16 *SITUATIONS AND ASSUMPTIONS*

(A) Situations

- (1) The specific facilities involved with hazardous materials subject to the emergency planning requirements of Section 302 of the Superfund Amendments and Reauthorization Act of 1986 (SARA, Title III) are listed in Appendix F-B.
- (2) The threat of a major disaster involving hazardous materials has escalated due to the increase in everyday use and transportation of chemicals by all the various segments of our population.

(3) The results of a hazardous material accident could include death or serious injury of persons exposed to the material, the spread of contaminants in varying degree throughout the county, and the destruction of property from fire, explosion, and general exposure.

(4) Evacuation, a protective mitigation measure, could isolate evacuees from their homes for an indefinite period of time and may require temporary evacuation to an established and approved shelter identified by Alexander County Emergency Management (listed on WebEOC).

(5) Victims of hazardous material accidents may require unique or special medical care not typically needed in other types of emergencies.

(6) The release of hazardous materials may have short and/or long term health and environmental effects depending upon the chemical composition or substance.

(7) A hazardous material incident may affect several hundreds of people within the jurisdiction without warning.

(8) A hazardous material incident may require the public to “shelter-in-place” in order to be protected from exposure to conditions of the emergency. These “shelter-in-place” directives include, but are not limited to, occupancies where persons, because of age, physical limitations, mental limitations, chemical or medical dependency or treatment, cannot respond on an individual basis to an emergency.

(B) *Assumptions.* The provisions of this plan are based on the assumption that:

(1) Most, but not all, people affected by a hazardous material accident will follow instructions and shelter-in-place or relocate/evacuate to a designated area.

(2) Public notification and warning, and evacuation if required, will be in accordance with the procedures described in the Notification and Warning section of this plan, and the evacuation and Transportation (ESF-1) portion of the EOP master plan, copies of which are available at the Alexander County Public Services office and the Emergency Management Coordinator.

(3) The county must respond to the incident in the initial phase without assistance from outside the county. Emergency response agencies will take appropriate actions to prevent or minimize the spread of the material (within their level of training and capabilities defined in their bylaws and SOGs), provide early first aid as necessary (so long as they are not creating undue or additional exposures), and management of the incident scene using the National Incident

Management System, and the adopted Incident Command System, with emphasis toward safety of the public and responding personnel.

(4) Planning and continued training prior to an incident will significantly reduce the risk to personnel at a hazardous material emergency. The NC Office of State Fire Marshal and the NC community college system will provide the initial and continuing education required minimum training to first responders to the appropriate levels to meet adopted OSHA standards.

(5) The hazardous materials involved in an accident can be identified within a reasonable period of time by the owner of the facility or the operator or owner of the vehicle, by the required shipping documents, by the properties of the material itself, or by information provided pursuant to Title III of the Right-to-Know Act, N.C.G.S 95-173 *et seq.*

(6) A facility involved in a hazardous material accident will attempt to provide all information required by SARA, Title III, Section 304 on a timely basis.

(7) Emergency response personnel are to be knowledgeable in the use of available resources.

(8) The U.S. Department of Transportation Emergency Response Guidebook (DOT P 5800.4) either alone or in combination with other information sources, will be used as a guide for initial protective action at incidents involving hazardous materials.

153.17 *CONCEPT OF OPERATION*

(A) There are two types of incidents involving hazardous materials:

- (1) Incidents at fixed facilities
- (2) Transportation incidents

(B) The level of response required for an incident will be determined by:

- (1) The quantity and toxic effects of the material involved in an actual or imminent release;
- (2) The population and/or property threatened;
- (3) The type and availability of protective equipment required for the released material;
- (4) The probable consequences should no immediate mitigation efforts be taken.

(C) Depending upon the threat posed by the incident, protective responses initiated for the safety of the public will often include one of, or a combination of, “shelter-in-place”, evacuation, isolation of the contaminated environment, and isolation/decontamination of contaminated persons.

(D) Incidents will be classified according to level of risk assessed by the designated Incident Commander.

(1) Level I (Potential Emergency Condition) is an incident which can be controlled by the first response agencies, does not require evacuation or other than the involved structure or immediate outdoor area, and does not suggest that major environmental damage may occur.

(2) Level II (Limited Emergency Condition) is an incident involving a critical hazard with a potential threat to life or property, requires a limited evacuation of the surrounding area, or suggests that major environmental damage could occur. Initial response to the incident can be adequately handled by the authority having jurisdiction’s personnel and own resources.

(3) Level III (Full Emergency Condition) is an incident that involves a severe hazard or large area, poses an extreme threat to life and property, and will most likely require a large-scale evacuation. Level III includes any incident requiring the combined expertise or resources of the County, State, federal and/or private agencies/organizations.

(E) Response procedures for each level of incident will be according to local policies and procedures in compliance with OSHA and other worker safety standards.

(F) This ordinance, and appropriate corresponding plan within the EOP, recognizes that hazardous material incidents can change with time, and necessitate escalating the response to a higher level, or de-escalate the response to lower levels as the emergency mitigation and control efforts are performed.

(G) When responding to an incident where hazardous materials are known to be stored, the responders will assume the involvement of the most toxic, corrosive, dangerous, flammable, combustible, explosive and reactive substances at that location unless otherwise informed.

(H) The Alexander County Local Emergency Planning Committee (LEPC) has been established at the county level to identify the magnitude of the local hazards, assess the vulnerabilities of the community to the hazards, and provide planning guidance for emergency response to not only fixed facility incidents but transportation as well. Representation on the LEPC is prescribed by the policy of the North Carolina Emergency Response Commission, and those agencies or groups that have an interest in hazardous materials and their effects on the public and environment may have a representative on

the committee, or attend as a guest when no committee positions are open for membership

(I) A Facility Emergency Coordinator will be identified at each covered facility under SARA, Title III, Section 302. This Facility Emergency Coordinator is to serve as the point of contact at all times, and will provide the necessary emergency response information on the facility to the LEPC.

(J) Notification of a release of a hazardous material may be provided to anyone who recognizes that a release has occurred. The telephone will be the primary means of alerting for any hazardous material incident. Secondary methods include two-way radio and monitoring alarm systems for initial facility notification. Tertiary means include text SMS or mobile device applications and use of the E-Plan online notification system.

(K) Warning and notification to the public, including warning and notification to special populations (including, but limited to the Alexander County Access and Functional Special Needs registry, hearing impaired, and medically disabled) will be accomplished in accordance with the Notification and Warning Annex (Appendix F-C) of this plan. Procedures for warning that have been developed for the hazard zones surrounding identified fixed facilities supersede the provisions of Appendix F-C.

(L) As necessary emergency vehicles with effective sound devices (sirens and/or public address speaker systems) shall be used as a public alerting system. If a fixed notification system is in place around the facility or emergency area the vehicles may be used as a backup to the fixed system. The vehicles will be dispatched within the evacuation area and will stop at each quarter mile in populated areas and at each house or group of houses that are more than a quarter mile apart. The emergency vehicle will notify the public of the situation and/or recommended evacuation or protective measure.

(M) Each route shall be run twice where possible to ensure receipt of the warning by all members of the community. The second run, or backrun, will be to confirm alert and notification. Backruns need only stop at houses that are dark at night or where it is apparent that people are not willfully complying with instructions. If necessary, door-to-door alerting will be accomplished during the second run. At no time will any private citizen be physically forced, threatened with force, or threatened with legal action for non-compliance while on their own private property. They are to be informed of the risk and offered protective measures for sake of safety and security, and that they may not receive any emergency assistance from personnel if they choose not to comply.

153.18 *GENERAL ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES*

Each agency involved in hazardous materials emergency response is responsible for the safety of its personnel. Training, emergency response policy and procedures, and medical

surveillance shall comply with the provisions of the North Carolina Hazardous Waste Operations and Emergency Response Standard (13 NCAC 7C.0101(a)(26)) referred to as “Haz Woper”. Topics addressed shall include, but not be limited to, the dangers of hazardous materials, emergency response techniques, protective measures, the provisions of protective clothing and equipment, medical monitoring, and respiratory protection for personnel. In this regard, the head of each agency is, therefore, ultimately responsible for developing, maintain, and updating training programs and standard operating procedures.

153.19 COUNTY RESPONSIBILITIES

(A) Chairperson of the Board of County Commissioners

(1) In addition to specific assignments and responsibility identified in the EOP and Containment Plan within it, the Chairperson of the BOCC will nominate a board member to the LEPC, and the board as a whole, will vote to approve any appointments to the LEPC in accordance with Title III, SARA, and the policies of the state Emergency Response Commission (NCERC) to provide local emergency planning as required. This LEPC will be appointed and is to be made up of persons and agency representatives required by law, and adopted policies.

(2) The Chairperson shall encourage cooperation among the LEPC, local government agencies, facilities, and other applicable response organizations.

(B) County Manager

(1) Ensure that county facilities with hazardous material are properly identified, reported, and a facility emergency coordinator is appointed.

(2) Provide administrative support to the LEPC as required.

(C) Emergency Management Coordinator

(1) Coordinate exercises and tests of the emergency plans in accordance with current requirements and concurrence of the LEPC.

(2) Support the LEPC in maintaining liaison with facility emergency coordinators to ensure availability of current information concerning hazards and response to an incident (may be referred to as Tier II Reporting in other text).

(3) Ensure critique of incident responses to assess and update procedures as needed.

(4) Serve as the Community Emergency Coordinator as required by SARA, Title III, Section 303.

(5) Serve as liaison for the LEPC in coordinating planning efforts with other political subdivisions for facilities that affect multiple jurisdictions.

(D) *Incident Commander*

(1) Implement the necessary steps to safeguard human life, property, and the environment in accordance with available guidance.

(2) Secure the area as required by the situation.

(3) Identify the material involved without undue risk or exposure to the public or emergency response personnel.

(4) Assess the situation and communicate the results with the Alexander County 911 Communication Center, the Emergency Operations Center, and facility representatives.

(5) Appoint a safety officer and then other staff members as the situation requires.

(6) Select a strategy (confinement, containment, or neutralization) and implement tactics (evacuation, shelter, offensive/defensive posture, etc.) with regard to available resources and capability of personnel.

(E) *Health Department.* In addition to other responsibilities identified in this ordinance and other plans and directives, the Alexander County Health Department will assist in enforcement of regulations and the initiation of legal actions against parties responsible for release of hazardous materials in violation of regulations.

(F) *Emergency Medical Services.* The EMS Supervisors, in coordination with the Public Services Director, shall develop guidelines and procedures for:

(1) Triage and treatment of contaminated patients.

(2) Decontamination of patients and necessary equipment, independent of, or in concurrent operation of the Hazardous Materials Team, while maintaining chain of command within the incident command system.

(3) Direction and control of Mass Casualty Incident functions under the operations branch, resulting from the release and exposure to hazardous material.

153.20 LOCAL EMERGENCY PLANNING COMMITTEE

(A) *Purpose.* The LEPC shall ensure fulfillment of responsibilities for local emergency planning pursuant to SARA, Title III and the policies of the State Emergency Response Commission.

(B) *Duties.* The LEPC shall:

- (1) Assess the current level of prevention, preparedness, and response capability within the jurisdictions.
- (2) Review existing plans for overlap, useful information, and ideas.
- (3) Conduct a hazard analysis to identify hazards, vulnerability, and risk.
- (4) Ensure an active chemical hazard identification program within the county, as well as a vulnerability assessment and risk analysis, as appropriate.
- (5) Develop plans and procedures to protect the public (to include “shelter-in-place” or evacuation if necessary) during a hazardous material incident by developing a county Emergency Operations Plan using the [NC Multi-Hazard Mitigation Plan](#) as a guide.
- (6) Ensure the public is educated through public awareness programs for possible emergencies in their area, kept informed during a hazardous material incident, and permitted access to the information regarding chemical hazards in the community and as identified in this ordinance, the EOP, and by Tier II reporting.
- (7) Develop and/or ensure procedures for notification are in-place and effective in the event of an incident involving hazardous material.
- (8) Identify individuals and groups within risk areas who have access, functional, and special needs, such as transportation, advanced medical care, or other special warning.
- (9) Ensure adequate training for all responders (including management) to a hazardous material incident in accordance with established regulations, guidelines and policies.
- (10) Ensure agencies develop and maintain standard operating guidelines / procedures or hazardous material response operations.
- (11) Identify resources needed for response to a hazardous material incident from public and private sources and make recommendations to the County Manager and Board of County Commissioners about emergency response matters.

(12) Ensure an ongoing program for plan implementation, maintenance, training, and exercising for stakeholders and responders.

(13) Ensure that the provisions of Title III, SARA 1986, are complied with within the county on a continuing basis.

(14) Assure coordination of planning efforts between jurisdictions including the development of notification/warning, and remediation procedures for covered facilities.

153.21 STATE RESPONSIBILITIES

(A) The North Carolina Emergency Management staff in the Plans and Operations divisions, in accordance with state statutes, are responsible for support to the local jurisdictions. The NC State Emergency Response Team (SERT) is available, as needed, for assistance in the event of an incident. Most state agencies (especially those with a response role such as state and federal Environmental Management and Protection, Solid and Hazardous Waste, NC State NC Highway Patrol, NC National Guard, and others) are available to assist local jurisdictions through requests passed through the SERT, NCEM State EOC, and online resource management portals like WebEOC.

(B) The NCEM Area Coordinator has been empowered by the Secretary of the NC Department of Public Safety to act on his or her behalf as prescribed in [N.C.G.S Chapter 166A](#) and is responsible for local assistance, when requested, during an incident and will be the single on-scene coordinator of state resources.

153.22 SPECIFIC FIXED FACILITY INFORMATION

(A) Information about each facility identified under SARA Title III as having extremely hazardous materials exceeding the threshold planning quantities will be collected, kept current, and the information distributed to responders as required.

(B) The information on each identified facility is available in a Section 302 Facility Information Notebook, located in the county [EOP](#), with a copy in the Alexander County Emergency Management Office.

153.23 FACILITY EMERGENCY COORDINATOR

(A) *Facility Responsibilities.* The Facility Emergency Coordinator shall:

(1) Ensure that reportable information is provided to the LEPC in a timely manner. Tier II forms are required from all facilities subject to SARA, Title III, Sections 311 and 312.

(2) Ensure that the facility emergency response procedures are current and effective for its property. Procedures shall specify actions for the immediate and follow-up notification of the local, state, and federal authorities in the event of a hazardous material incident. A description of emergency procedures shall be submitted in writing to the LEPC.

(3) Ensure that facility personnel are trained in emergency response procedures, including but not limited to determining that a release or exposure has occurred, notifying the appropriate facility personnel, and public officials, and initiation of protective and/or hazard suppression/mitigation measures.

(4) Ensure that the facility has a current inventory of equipment and resources available for response to a hazardous material emergency.

(B) Incident Responsibilities: The Facility Emergency Coordinator shall provide technical representative to the incident command post and/or the EOC, as required during an incident.

153.24 HAZARDOUS MATERIALS TRANSPORTATION INCIDENTS

(A) All provisions of the Emergency Operations Plan, as well as the DOT Emergency Response Guidebook will be used for guidance during a transportation incident involving Hazardous Materials.

(B) The routes for the transportation of hazardous materials identified by Alexander County Emergency Management, Alexander County Fire Marshal and the LEPC during the hazard analysis process are listed in the individual facility information data.

(C) Other sources of guidance, such as software based applications and online resources, may be utilized during a transportation incident involving hazardous materials. The first responders to a hazardous material incident should follow their agency's standard operating guidelines and procedures/policies for the initial actions involving a transportation related incident.

153.25 DIRECTION AND CONTROL

(A) The overall direction and control of emergency activities in a crisis situation is vested with the Chairperson of the Board of County Commissioners.

(B) On-scene management will be established by a designated Incident Commander. The Fire Department authority having jurisdiction within which the incident occurs will be the lead county agency, and the Fire Chief or senior officer or member present of that Department will be the Incident Commander unless delegated to a more qualified individual.

(C) The entire county emergency response force, including Alexander County Hazardous Materials Team, and full activation of the Alexander County EOC, may not be enough to handle every type of emergency involving a hazardous material.

153.26 *LINES OF SUCCESSION*

Lines of succession for agencies and officials involved in a hazardous material incident are in accordance with established procedures and are specified in the functional annexes of this ordinance and other plans, copies of which are available for inspection in the office of the County Manager.

153.27 *ADMINISTRATION AND LOGISTICS*

(A) The agencies that may become involved in a hazardous material incident will develop procedures to cope with a major incident involving hazardous material. The Emergency Management Coordinator and the LEPC will ensure, through the use of information provided pursuant to SARA, Title III, Sections 302, 304, 311, 312, and 313 and of other knowledge, experience, or education, that all identified hazards are evaluated.

(B) Equipment and supplies for response to a hazardous material incident will be provided initially from a responding agencies' resources. Additional resources will be obtained through mutual aid agreements or from private organizations and facilities. State and federal aid may be requested after local resources have been exhausted or determined to be inadequate for the task. The Emergency Management Coordinator by virtue of the Public Services Director will provide equipment and supplies for the EOC.

(C) Training programs for emergency responders of the county will be through individual agency continuing-education (sometimes referred to as "in-service" training), NC community college courses, and other offerings of related training. A schedule of these programs is maintained and distributed by the Alexander County Emergency Management and Fire Marshal's offices.

(D) Exercise schedules for this plan are developed and maintained by Alexander County Emergency Management. Exercises shall be in accordance with local, state, and federal policies, and, when possible, coordinated with Area 11 of the NCEM Western Branch Office. The types of exercise will include, but not be limited to, table-top, functional, and full-scale type exercise. There must be at least one full-scale exercise every five (5) years. An actual occurrence may be substituted for an exercise provided it adequately tested response functions addressed in this

ordinance and corresponding plans, and an after action review critique of the event is conducted.

153.28 *PLAN DEVELOPMENT AND MAINTENANCE*

(A) The Emergency Management Coordinator will coordinate with the LEPC, the designated Facility Coordinators, and thither applicable agencies in the development and maintenance of this ordinance and corresponding plans.

(B) This chapter is designated to be used as an integral part of the Emergency Operations Plan. Other parts must be consulted for information not included in this chapter.

(C) The LEPC will approve and review the ordinance and corresponding Emergency Operation Plan on at least an annual basis. Changes will be submitted to the committee when necessary. Copies will be made available to the public, NC Emergency Management, and other agencies upon request.

Ordinance passed 2/1/1992
Amended 7/18/2022

Appendix F-A: FIXED FACILITIES HAVING HAZARDOUS MATERIALS

FACILITY NAME	District	within a WSWS	WS Type
Hancock & Moore Plant #1	Bethlehem	<i>NO</i>	N/A
Hancock & Moore Plant #3	Bethlehem	<i>NO</i>	N/A
Lakeside Marina	Bethlehem	<u><i>YES</i></u>	WS-IV
River's Edge Marina	Bethlehem	<u><i>YES</i></u>	WS-IV
Sandbar Marina & Grill	Bethlehem	<i>NO</i>	N/A
Jet Check	Bethlehem	<i>NO</i>	N/A
Cubbard Express #6	Bethlehem	<i>NO</i>	N/A
(NEW) Cubbard Express #15	Bethlehem	<i>NO</i>	N/A
Ferfellgas/Randy Milstead Farm	Ellendale	<i>NO</i>	N/A
Propst #4	Ellendale	<i>NO</i>	N/A
American Roller Bearing Co.	Hiddenite	<u><i>YES</i></u>	WS-IV
Mitchell Gold Company	Hiddenite	<i>NO</i>	N/A
Paragon Films, Inc.	Hiddenite	<u><i>YES</i></u>	WS-II
All American Raceway	Hiddenite	<i>NO</i>	N/A
Cubbard Express #12	Hiddenite	<i>NO</i>	N/A
Jean's Store & Grill	Hiddenite	<i>NO</i>	N/A
Four Brothers	Taylorsville	<i>NO</i>	N/A
Quality Oil	Taylorsville	<i>NO</i>	N/A
Pahal Shop and Save	Taylorsville	<u><i>YES</i></u>	N/A
Murphy Oil USA (Walmart)	Taylorsville	<i>NO</i>	N/A
Shell Brothers/Bumgarner Oil	Taylorsville	<i>NO</i>	N/A
Quality Oil (Quality Plus)	Taylorsville	<u><i>YES</i></u>	N/A
Alexander Correctional Institute	Taylorsville	<u><i>YES</i></u>	WS-IV
BellSouth	Taylorsville	<i>NO</i>	N/A

Energy United Propane	Taylorsville	<i>NO</i>	N/A
Hancock & Moore Plant #2	Taylorsville	<i>NO</i>	N/A
Argo Ready Mixed Concrete	Taylorsville	<i>NO</i>	N/A
Town of Taylorsville	Taylorsville	<i>NO</i>	N/A
Stony Point Convenience/Citgo	Stony Point	<u><i>YES</i></u>	WS-II
Propst #9	Sugar Loaf	<i>NO</i>	N/A
Farmers Oil Co.	Vashti	<u><i>YES</i></u>	WS-II
Taylor King Furniture, Inc.	Wittenburg	<u><i>YES</i></u>	WS-IV
Alexander Trucking Co.	Wittenburg	<u><i>YES</i></u>	WS-IV
Triumph Insulation Systems	Wittenburg	<u><i>YES</i></u>	WS-IV
Highway 16 Superette	Wittenburg	<u><i>YES</i></u>	WS-IV

Appendix F-B: FIXED FACILITIES HAVING EXTREMELY HAZARDOUS MATERIALS

FACILITY NAME	District	within WSWS	WS Type
BellSouth	Stony Point	<i>YES</i>	WS-IV
ShurTape Technologies, LLC	Stony Point	<i>NO</i>	N/A
Piedmont Fiberglass Inc.	Taylorsville	<i>YES</i>	WS-II
BellSouth	Taylorsville	<i>NO</i>	N/A

Appendix F-C: FACILTY INFORMATION NOTEBOOK ENTRY

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Appendix F-C: FACILITY INFORMATION NOTEBOOK ENTRY

FACILITY INFORMATION SUMMARY PAGE (TEMPLATE)

FACILITY NAME:

LOCATION:

FACILITY EMERGENCY COORDINATORS

PRIMARY

ALTERNATE

NAME:

NAME:

WORK PHONE:

WORK PHONE:

HOME PHONE:

HOME PHONE:

EMERGENCY RESPONSE AGENCIES

FIRE

1.

2.

Standby

3.

LAW ENFORCEMENT

1.

2.

RESCUE

1.

EMS

1.

OFF-SITE EVACUATION PROCEDURES

The Hazard Identification and Vulnerability assessment has revealed a minimum distance of _____ and a maximum distance of _____ would need to be evacuated, depending on the conditions and circumstances of the specific incident and the chemical involved. The attached evacuation map shows the maximum distance and has been sectioned into smaller zones. The zones are marked and will be used when an actual evacuation is deemed necessary. The information for each zone is contained as follows:

ZONE INFORMATION FORM (TEMPLATE)

ZONE #

LOCATION: [*North/south/east/west or GPS of facility*]

DAYTIME POPULATION: [*Estimate*]

NIGHTTIME POPULATION: [*Estimate*]

MAIN TRANSPORTATION ROUTES: [*Road or street names*]

AT-RISK FACILITIES: [*Schools, hospitals, day cares, water supplies, nursing homes, churches, etc*]

CONTRIBUTING FACILITIES: [*Other hazardous material facilities*]

DESIGNATED SHELTER: [*Location*]

TRAFFIC CONTROL POINTS:

SPECIAL NEEDS: [*Individuals requiring special notification or assistance*]

Appendix F-D: HAZARD ANALYSIS SUMMARY

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Appendix F-E: GLOSSARY

Boiling Point - The temperature at which the vapor pressure of a liquid equals the atmospheric pressure of 14.7 pounds per square inch absolute (psia) (101 kPa) or 760 mm of mercury. Where an accurate boiling point is unavailable for the material in question, or for mixtures which do not have a constant boiling point, for the purposes of this classification, the 20% evaporated point of a distillation performed in accordance with ASTM D 86 shall be used as the boiling point of the liquid.

Carrier - Shall mean any person who engages in the transportation of oil or other hazardous substances for compensation.

Ceiling Limit - The maximum concentration of an air-borne contaminant to which one may be exposed. The ceiling limits utilized are those published in DOL 29 CFR Part 1910.1000. The ceiling Recommended Exposure Limit (REL-C) concentrations published by the U.S. National Institute for Occupational Safety and Health (NIOSH), Threshold Limit Value-Ceiling (TLV-C) concentrations published by the American Conference of Governmental Industrial Hygienists (ACGIH), Ceiling Workplace Environmental Exposure Level (WEEL-Ceiling) Guides published by the American Industrial Hygiene Association (AIHA), and other *approved*, consistent measures are allowed as surrogates for hazardous substances not listed in DOL 29 CFR Part 1910.1000.

Chemical - An element, chemical compound or mixture of elements or compounds or both.

Chemical Name - The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry, the Chemical Abstracts Service rules of nomenclature, or a name which will clearly identify a chemical for the purpose of conducting an evaluation.

Closed Container - A container sealed by means of a lid or other device such that liquid, vapor or dusts will not escape from it under ordinary conditions of use or handling.

Combustible Liquid - A liquid having a closed cup flash point at or above 100°F (38°C). Combustible liquids shall be subdivided as follows:

Class II. Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA. Liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB. Liquids having closed cup *flash points* at or above 200°F (93°C).

The category of combustible liquids does not include *compressed gases* or *cryogenic fluids*.

Compressed Gas - A material, or mixture of materials that:

1. Is a gas at 68°F (20°C) or less at 14.7 psia (101 kPa) of pressure; and
2. Has a *boiling point* of 68°F (20°C) or less at 14.7 psia (101 kPa) which is either liquefied, nonliquefied or in solution, except those gases which have no other health- or physical-hazard properties are not considered to be compressed until the pressure in the packaging exceeds 41 psia (282 kPa) at 68°F (20°C).

The states of a compressed gas are categorized as follows:

1. Nonliquefied compressed gases are gases, other than those in solution, which are in a packaging under the charged pressure and are entirely gaseous at a temperature of 68°F (20°C).
2. Liquefied compressed gases are gases that, in a packaging under the charged pressure, are partially liquid at a temperature of 68°F (20°C).
3. Compressed gases in solution are nonliquefied gases that are dissolved in a solvent.
4. Compressed gas mixtures consist of a mixture of two or more compressed gases contained in a packaging, the hazard properties of which are represented by the properties of the mixture as a whole.

Container - A vessel of 60 gallons (227 L) or less in capacity used for transporting or storing hazardous materials. Pipes, piping systems, engines and engine fuel tanks are not considered to be containers.

Control Area - Spaces within a building where quantities of hazardous materials not exceeding the *maximum allowable quantities per control area* are stored, dispensed, used or handled. See also the definition of "outdoor control area."

Cylinder - A pressure vessel designed for pressures higher than 40 psia (275.6 kPa) and having a circular cross section. It does not include a portable tank, multiunit tank car tank, cargo tank or tank car.

Day Box - A portable magazine designed to hold *explosive* materials and constructed in accordance with the requirements for a Type 3 magazine as defined and classified in Chapter 56 of the NC Fire Code.

Deflagration - An exothermic reaction, such as the extremely rapid oxidation of a flammable dust or vapor in air, in which the reaction progresses through the unburned material at a rate less than the velocity of sound. A deflagration can have an explosive effect.

Designed Pressure - The maximum gauge pressure that a pressure vessel, device, component or system is designed to withstand safely under the temperature and conditions of use expected.

Detached Building - A separate single-story building, without a *basement* or crawl space, used for the storage or use of hazardous materials and located an *approved* distance from all structures.

Discharge - Shall mean, but shall not be limited to, any emission, spillage, leakage, pumping, pouring, emptying, or dumping of oil or other hazardous substances into waters.

Dispensing - The pouring or transferring of any material from a container, tank or similar vessel, whereby vapors, dusts, fumes, mists or gases are liberated to the atmosphere.

Excess Flow Control - A fail-safe system or other *approved* means designed to shut off flow caused by a rupture in pressurized piping systems.

Exhausted Enclosure - An appliance or piece of equipment which consists of a top, a back and two sides providing a means of local exhaust for capturing gases, fumes, vapors and mists. Such enclosures include laboratory hoods, exhaust fume hoods and similar appliances and equipment used to retain and exhaust locally the gases, fumes, vapors and mists that could be released. Rooms or areas provided with general ventilation, in themselves, are not exhausted enclosures.

Explosion - An effect produced by the sudden violent expansion of gases, which may be accompanied by a shock wave or disruption, or both, of enclosing materials or structures. An explosion could result from any of the following:

1. Chemical changes such as rapid oxidation, *deflagration* or *detonation*, decomposition of molecules and runaway polymerization (usually *detonations*).
2. Physical changes such as pressure tank ruptures.
3. Atomic changes (nuclear fission or fusion).

Flammable Gas - A material which is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure [a material that has a *boiling point* of 68°F (20°C) or less at 14.7 psia (101 kPa)] which:

1. Is ignitable at 14.7 psia (101 kPa) when in a mixture of 13 percent or less by volume with air; or
2. Has a flammable range at 14.7 psia (101 kPa) with air of not less than 12 percent, regardless of the lower limit. The limits specified shall be determined at 14.7 psi (101 kPa) of pressure and a temperature of 68°F (20°C) in accordance with ASTM E 681.

Flammable Liquefied Gas - A liquefied *compressed gas* which, under a charged pressure, is partially liquid at a temperature of 68°F (20°C) and which is flammable.

Flammable Liquid - A liquid having a closed cup flash point below 100°F (38°C). Flammable liquids are further categorized into a group known as Class I liquids. The Class I category is subdivided as follows:

Class IA. Liquids having a flash point below 73°F (23°C) and having a *boiling point* below 100°F (38°C).

Class IB. Liquids having a *flash point* below 73°F (23°C) and having a *boiling point* at or above 100°F (38°C).

Class IC. Liquids having a *flash point* at or above 73°F (23°C) and below 100°F (38°C). The category of flammable liquids does not include *compressed gases* or *cryogenic fluids*.

Flammable Material - A material capable of being readily ignited from common sources of heat or at a temperature of 600°F (316°C) or less.

Flammable Solid - A solid, other than a blasting agent or *explosive*, that is capable of causing fire through friction, absorption of moisture, spontaneous chemical change or retained heat from manufacturing or processing, or which has an ignition temperature below 212°F (100°C) or which burns so vigorously and persistently when ignited as to create a serious hazard. A chemical shall be considered a flammable solid as determined in accordance with the test method of CPSC 16 CFR Part 1500.44, if it ignites and burns with a self-sustained flame at a rate greater than 0.0866 inch (2.2 mm) per second along its major axis.

Flammable Vapors or Fumes - The concentration of flammable constituents in air that exceeds 25 percent of their lower flammable limit (LFL).

Flash Point - The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion. The flash point of a liquid shall be determined by appropriate test procedure and apparatus as specified in ASTM D 56, ASTM D 93 or ASTM D 3278.

Gas Cabinet - A fully enclosed, ventilated, noncombustible enclosure used to provide an isolated environment for *compressed gas* cylinders in storage or use. Doors and access ports for exchanging cylinders and accessing pressure-regulating controls are allowed to be included

Gas Room - A separately ventilated, fully enclosed room in which only *compressed gases* and associated equipment and supplies are stored or used.

Handling - The deliberate transport by any means to a point of storage or use.

Hazardous Materials - Those chemicals or substances which are *physical hazards* or *health hazards* as defined and classified in this chapter, whether the materials are in usable or waste condition.

Hazardous Substance - shall mean any substance, other than oil, which is discharged in any quantity may present an imminent and substantial danger to the public health or welfare.

Health Hazard - A classification of a chemical for which there is statistically significant evidence that acute or chronic health effects are capable of occurring in exposed persons. The term "health hazard" includes chemicals that are toxic, highly toxic and *corrosive*.

Immediately Dangerous to Life and Health (IDLH) - The concentration of air-borne contaminants that poses a threat of death, immediate or delayed permanent adverse health effects, or effects that could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health (NIOSH) based on both toxicity and flammability. It generally is expressed in parts per million by volume (ppm v/v) or milligrams per cubic meter (mg/m³). Where adequate data do not exist for precise establishment of IDLH concentrations, an independent certified industrial hygienist, industrial toxicologist, appropriate regulatory agency or other source *approved* by the *fire code official* shall make such determination.

Incompatible Materials - Materials that, when mixed, have the potential to react in a manner which generates heat, fumes, gases or byproducts which are hazardous to life or property.

Liquid - A material having a melting point that is equal to or less than 68°F (20°C) and a *boiling point* which is greater than 68°F (20°C) at 14.7 pounds per square inch absolute (psia) (101 kPa). Where not otherwise identified, the term "liquid" includes both flammable and *combustible liquids*.

Lower Explosive Limit (LEL) - The lowest concentration (by percentage) of a gas or vapor in air that is capable of producing a flash of fire in presence of an ignition source (arc, flame, heat). Concentrations lower than the Lower Explosive Limit are 'too lean' to burn; those above the Upper Explosive Limit (UEL) are too rich to burn.

Lower Flammable Limit (LFL) - The minimum concentration of vapor in air at which propagation of flame will occur in the presence of an ignition source.

Material Safety Data Sheets (MSDS or SDS) - Information concerning a hazardous material which is prepared in accordance with the provisions of DOL 29 CFR Part 1910.1200 or in accordance with the provisions of a federally *approved* state OSHA plan.

Maximum Allowable Quantity Per Control Area - The maximum amount of a hazardous material allowed to be stored or used within a *control area* inside a building or an outdoor *control area*. The maximum allowable quantity per control area is based on the material state (solid, liquid or gas) and the material storage or use conditions.

Normal Temperature and Pressure (NTP) - A temperature of 70°F (21°C) and a pressure of 1 atmosphere [14.7 psia (101 kPa)].

Oil - shall mean oil of any kind and form, including, but specifically not limited to, petroleum, crude oil, diesel oil, fuel oil, gasoline, lubrication oil, oil refuse, oil mixed with other waste, oil

sludge, petroleum related products or by-products, and all other liquid hydrocarbons, regardless of specific gravity, whether singularly or in combination with other substances.

Outdoor Control Area - An outdoor area that contains hazardous materials in amounts not exceeding the maximum allowable quantities of Table 5003.1.1(3) or Table 5003.1.1(4). Permissible Exposure Limit (PEL).

Oxidizing Gas - A gas that can support and accelerate combustion of other materials more than air does.

Permissible Exposure Limit - The maximum permitted 8-hour time-weighted-average concentration of an air-borne contaminant. The exposure limits to be utilized are those published in DOL 29 CFR Part 1910.1000. The Recommended Exposure Limit (REL) concentrations published by the U.S. National Institute for Occupational Safety and Health (NIOSH), Threshold Limit Value-Time Weighted Average (TLV-TWA) concentrations published by the American Conference of Governmental Industrial Hygienists (ACGIH), Workplace Environmental Exposure Level (WEEL) Guides published by the American Industrial Hygiene Association (AIHA), and other approved, consistent measures are allowed as surrogates for hazardous substances not listed in DOL 29 CFR Part 1910.1000

Physical Hazard - A chemical for which there is evidence that it is a *combustible liquid, cryogenic fluid, explosive, flammable (solid, liquid or gas), organic peroxide (solid or liquid), oxidizer (solid or liquid), oxidizing gas, pyrophoric (solid, liquid or gas), unstable (reactive) material (solid, liquid or gas) or water-reactive material (solid or liquid).*

Pressure Vessel - A closed vessel designed to operate at pressures above 15 psig (103 kPa).

Primary Containment - The first level of containment, consisting of the inside portion of that container which comes into immediate contact on its inner surface with the material being contained.

Restoration (Restore) - shall mean any activity or project undertaken in the public interest or to protect public interest or to protect public property or to promote the public health, safety or welfare for the purpose of restoring any lands or waters affected by an oil or other hazardous substances discharge as nearly as is possible or desirable to the condition which existed prior to the discharge.

Safety Can - An *approved* container of not more than 5-gallon (19 L) capacity having a spring-closing lid and spout cover so designed that it will relieve internal pressure when subjected to fire exposure.

Secondary Containment - That level of containment that is external to and separate from primary containment.

Segregated - Storage in the same room or inside area, but physically separated by distance from *incompatible materials*.

Solid - A material that has a melting point and decomposes or sublimates at a temperature greater than 68°F (20°C).

Storage, Hazardous Materials - The keeping, retention or leaving of hazardous materials in closed containers, tanks, cylinders, or similar vessels; or vessels supplying operations through closed connections to the vessel.

System - An assembly of equipment consisting of a tank, container or containers, appurtenances, pumps, compressors and connecting piping.

Tank - A vessel containing more than 60 gallons (227 L).

Tank, Atmospheric - A storage tank designed to operate at pressures from atmospheric through 1.0 pound per square inch gauge (760 mm Hg through 812 mm Hg) measured at the top of the tank.

Tank, Portable - A packaging of more than 60-gallon (227 L) capacity and designed primarily to be loaded into or on or temporarily attached to a transport vehicle or ship and equipped with skids, mountings or accessories to facilitate handling of the tank by mechanical means. It does not include any cylinder having less than a 1,000-pound (454 kg) water capacity, cargo tank, tank car tank or trailers carrying cylinders of more than 1,000-pound (454 kg) water capacity.

Tank, Stationary - Packaging designed primarily for stationary installations not intended for loading, unloading or attachment to a transport vehicle as part of its normal operation in the process of use. It does not include cylinders having less than a 1,000-pound (454 kg) water capacity.

Tank, Vehicle - A vehicle other than a railroad tank car or boat, with a cargo tank mounted thereon or built as an integral part thereof, used for the transportation of flammable or *combustible liquids*, LP-gas or hazardous chemicals. Tank vehicles include self-propelled vehicles and full trailers and semitrailers, with or without motive power, and carrying part or all of the load.

Unauthorized Discharge - A release or emission of materials in a manner which does not conform to the provisions of this code or applicable public health and safety regulations.

Use (Material) - Placing a material into action, including solids, liquids and gases.

Unstable (Reactive) Material - A material, other than an *explosive*, which in the pure state or as commercially produced, will vigorously polymerize, decompose, condense or become self-reactive and undergo other violent chemical changes, including explosion, when exposed to heat, friction or shock, or in the absence of an inhibitor, or in the presence of contaminants, or in contact with *incompatible materials*. Unstable (reactive) materials are subdivided as follows:

Class 4. Materials that in themselves are readily capable of *detonation* or explosive decomposition or explosive reaction at *normal temperatures and pressures*. This class

includes materials that are sensitive to mechanical or localized thermal shock at *normal temperatures and pressures*.

Class 3. Materials that in themselves are capable of *detonation* or of explosive decomposition or explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation. This class includes materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures.

Class 2. Materials that in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This class includes materials that can undergo chemical change with rapid release of energy at *normal temperatures and pressures*, and that can undergo violent chemical change at elevated temperatures and pressures.

Class 1. Materials that in themselves are normally stable but which can become unstable at elevated temperatures and pressure.

Vapor Pressure - The pressure exerted by a volatile fluid as determined in accordance with ASTM D 323

Vessel - shall include every description of watercraft or other contrivance used, or capable of being used, as a means of transportation on water, whether self-propelled or otherwise, and shall include, but shall not be limited to, barges and tugs. The term "vessel", for purposes of this ordinance, as used herein may apply to any pleasure, sport or commercial fishing vessel, which has a fuel capacity of less than 500 gallons and is not used to transport petroleum, petroleum products, or general cargo.

Waters - shall mean any stream, river, creek, brook, run, canal, swamp, lake, sound, tidal estuary, bay, reservoir, waterway, wetlands, or any other body or accumulation of water, surface or underground, public or private, natural or artificial, which is contained within, flows through, or borders upon this State, or any portion thereof.