NEW HANOVER COUNTY
REQUEST FOR PROPOSALS
HAZARDOUS COMMODITY FLOW STUDY

COUNTY COMMISSIONERS
JULIA OLSON-BOSEMAN, CHAIR
PATRICIA KUSEK, VICE-CHAIR
JONATHAN BARFIELD, JR.
WOODY WHITE
ROB ZAPPLE

CHRIS COUDRIET, COUNTY MANAGER
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NEW HANOVER COUNTY
REQUEST FOR PROPOSALS
HAZARDOUS COMMODITY FLOW STUDY

New Hanover County Emergency Management Local Emergency Planning Committee (LEPC) seeks a consultant to update the existing Hazardous Commodity Flow Study (CFS) and update the correlating New Hanover County Emergency Operations Plan (EOP).

Proposals addressed to Teresa Smith, Emergency Management Technician/LEPC Chair, 230 Government Center Drive, Suite 115, Wilmington, NC 28403 and marked “RFP- HAZARDOUS COMMODITY FLOW STUDY” will be accepted until 5:00 PM EST., Tuesday, November 10, 2020.

Proposals may also be emailed to: tersmith@nhcgov.com. Please include “RFP - HAZARDOUS COMMODITY FLOW STUDY” in the subject line of your email submittal.

Complete requirements and information may be obtained by visiting the County’s website at https://finance.nhcgov.com/purchasing-solicitation/open-and-closed-Proposals/.

New Hanover County reserves the right to accept or reject any or all Proposals and to make the Award which will be in the best interest of the County.

Released: Friday, October 23, 2020
Section 2 – General Information

2.1 – Schedule

<table>
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<tr>
<td>Friday, October 23, 2020</td>
<td>RFP issued.</td>
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<tr>
<td>Friday, October 30, 2020 @ 5:00 PM EST</td>
<td>Deadline for questions</td>
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<tr>
<td>Wednesday, November 5, 2020</td>
<td>Questions will be answered via written addendum.</td>
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<tr>
<td>Tuesday, November 10, 2020 @ 5:00 PM.</td>
<td>Deadline for receipt of Proposals</td>
</tr>
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2.2 – Preparation of Proposal

2.2.1 Consultants are instructed to submit their proposal in a sealed envelope clearly marked “RFP- HAZARDOUS COMMODITY FLOW STUDY” and mail or hand deliver to:

   New Hanover County Finance Office
   Attn: Teresa Smith, Emergency Management Technician/LEPC Chair
   230 Government Center Drive, Suite 115
   Wilmington, NC 28403

   If your proposal is submitted via mail or hand delivery, you MUST include an electronic copy of your proposal.

   Proposals may also be emailed to tersmith@nhcgov.com. Please be sure to include “RFP- HAZARDOUS COMMODITY FLOW STUDY” in the subject line of your email.

2.2.2 Consultants are expected to examine the specifications herein, the schedule and all instructions. Failure to do so will be at the Consultant’s risk. Each Consultant shall furnish the information required on the Proposal Format sheet. CONSULTANTS MUST SIGN THE EXECUTION PAGE AND REMIT WITH THEIR PROPOSALS. IF THE EXECUTION PAGE IS NOT SIGNED AND SUBMITTED WITH THE PROPOSAL, THE PROPOSAL WILL BE DEEMED NONRESPONSIVE AND REJECTED.

   All prices and notations shall be written in ink or typed. Discrepancies between words and numerals will be resolved in favor of words.

   Changes or corrections made in the Proposal must be initialed by the individual signing the Proposal. No corrections will be permitted once Proposals have been opened.

2.2.3 Deadline for receipt of Proposals is Tuesday, November 10, 2020 at 5:00 PM EST. Proposals received after the time and date for closing will not be accepted.
2.3 – Insurance Requirements
Refer to New Hanover County Purchase Order Terms and Conditions.

2.4 – Questions
Questions concerning this solicitation should be directed to Teresa Smith, Emergency Management Technician/LEPC Chair by emailing tersmith@nhcgov.com. Questions will be received until Friday, October 30, 2020 at 5:00 PM EST.

2.5 – Communication
Other than the contact person detailed in Section 2.4 above, Consultants may not have communications, verbal or otherwise, concerning this RFP with any personnel or boards from New Hanover County, other than the person listed in this section which is Teresa Smith, Emergency Management Technician/LEPC Chair. If any Consultant attempts any unauthorized communication, the proposal may be rejected.

2.6 – Intent to Submit
All Consultants who intend to submit a Proposal on this project should send an email to tersmith@nhcgov.com. This will ensure that you receive any addenda issued for this RFP; if applicable. Consultants will be required to acknowledge receipt of any and all addendums issued for the project. Proposals received without acknowledgement of any addendum issued with be deemed non-responsive.

2.7 - Cost of Preparation of Response
Costs incurred by prospective Consultants in the preparation of the response to this RFP are the responsibility of the Consultant and will not be reimbursed by The County.

2.8 – Minor Deviations
New Hanover County reserves the right to allow or disallow minor deviations or technicalities should the County deem it to be in the best interest of the County. New Hanover County shall be the sole judge of what is to be considered a minor deviation or technicality.

2.9 – Ownership of Documents
All Proposals and accompanying documentation will become the property of New Hanover County at the time the Proposals are opened and as such will not be returned to the Consultant.

2.10 - Trade Secret Confidentiality
Upon receipt of your proposal by New Hanover County, your proposal is considered a public record except for material which qualifies as "trade secret" under N.C. General Statute 132-1.2. Consultants should mark all information they consider to be a trade secret as confidential and include in a separate sealed envelope. If emailing, include word “confidential” on each affected page. After opening, your proposal will be provided to
County staff and others who participate in the evaluation process, and to members of the general public who submit public records requests excluding any confidential information.

2.11 - Withdrawal of Proposals
No proposal may be modified, withdrawn, or canceled by the Consultant for a period of ninety (90) days following the receipt of Proposals. Negligence or error on the part of any Consultant in preparing his/her Proposal confers no right of withdrawal or modification after the Proposals have been opened.

2.12 - Equal Opportunity
The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

The Consultant agrees not to discriminate against any employees or applicant for employment because of physical or mental handicap in regard to any position for which the employees or applicant is qualified. The Consultant agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

Pursuant to GS 143-48, New Hanover County encourages small, minority, physically handicapped, and women firms to submit Proposals in response to this RFB.

2.13 - Indemnity
The successful Consultant shall indemnify and hold the County, its agents and employees, harmless against any and all claims, demands, causes of action, or other liability, including attorney fees, on account of personal injuries or death or on account of property damages arising out of or relating to the work to be performed by the Successful Consultant hereunder, resulting from the negligence of or the willful act or omission of the Consultant, his agents, employees and subcontractors.

2.14 - E-Verify
Pursuant to Session Law 2013-418, Consultant shall fully comply with the U.S. Department of Homeland Security employee legal status E-Verify requirements for itself and all its subcontractors. Upon execution of contract, County requires an affidavit attesting to Consultant’s compliance. Violation of the provision, unless timely cured, shall constitute a breach of contract.
2.16 - Addendum
The RFP package constitutes the entire set of instructions to the Consultant. The County shall not be responsible for any other instructions, verbal or written, made by anyone. Any changes to the specifications will be in the form of an Addendum which will be sent to all known Consultants who notified the Teresa Smith of their intent to submit a Proposal and posted on the County’s website. All addendums must be acknowledged by the Consultant.

You may visit our website at http://www.nhcgov.com/Finance/Pages/CurrentProposals.aspx to check for the issuance of any addenda before submitting your Proposal.

2.17 - Compliance with Proposal Requirements
Failure to comply with these provisions or any other provisions of the General Statutes of North Carolina will result in rejection of Proposal.

2.18 – Federal Uniform Guidance
If the source of funds for this contract is federal funds, the following federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable): Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C. 3141-3148); Copeland “Anti-Kickback” Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387); Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2 C.F.R. § 200.322); and Record Retention Requirements (2CFR § 200.324). (See Section 3 for Complete Details)

2.19 - Certificate of Authority
Subject to several statutory exceptions, a business entity incorporated or organized in a state other than North Carolina must obtain a certificate of authority from the North Carolina Secretary of State prior to transacting business in the State. See G.S. 55-15-01(a) (business corporations); G.S. 55A-15-01(a) (nonprofit corporations); G.S. 57D-7-01(a) (limited liability companies); G.S. 59-902(a) (limited partnerships); G.S. 59-91(a) (registered limited liability partnerships); G.S. 55B-16(a) (professional corporations). When the requirement applies, the foreign entity transacting business in the State is responsible for obtaining a certificate of authority—not the domestic (i.e., North Carolina) corporations, public entities, or individuals with whom the foreign entity might contract.

2.20 - Payment Terms
Payment is Net 30 days from the date of an approved invoice.
2.21 - Right to Reject Proposals

New Hanover County reserves the right to accept or reject any or all proposals in response to this solicitation.
Section 3– Scope of Work

Introduction:

New Hanover County Emergency Management Local Emergency Planning Committee (LEPC) seeks a consultant to update the existing Hazardous Commodity Flow Study (CFS) and update the correlating New Hanover County Emergency Operations Plan (EOP), Appendix H (Hazardous Materials). This project will be a two-function project:

1. Conduct a hazardous materials commodity flow study on all transportation modalities which pass through New Hanover County. This includes information on the materials moving by:
   a. Air
   b. Road
   c. Train
   d. Ports
   e. Pipeline

2. Review and revise the existing Appendix H of the County EOP to ensure recommendations by North Carolina Department of Emergency Management and metrics/standards as outlined in Department of Transportation planning standards are in place.

3. Provide general awareness information for Right to Know program development to share with interested stakeholders. This can include brochures and printables to enhance awareness and knowledge of citizens and businesses that could be impacted by hazmat incidents in the County.

Anticipated Scope of Work

1. Review previous CFS resources and update information.
   a. This study will involve, but not be limited to, all major highway, rail, ports and pipeline. This includes, but not limited to US 74/76, Interstate 40, Interstate 140, US 17 and other highways as determined appropriate. Rail evaluation will include rail yards and spurs where hazardous materials may be staged or stored outside of a control area at fixed facilities as determined appropriate. All transmission pipelines in and crossing the County will be included. Information on vessels traveling the navigable Cape Fear River through New Hanover County will be reviewed, as will air carriers moving hazardous materials at the Wilmington International Airport (ILM).
   b. Three primary methodologies to be used in the conduct of this study are as follows:
      i. Visual Observation: This involved deploying observers at designated locations at specified times to collect data on hazardous materials passing through that location. Using specifically designed data collection forms, they will record the information which will later the entered into an electronic database to be maintained by the County at the conclusion of the study for detailed analysis.
      ii. Analysis of the most current North Carolina Department of Transportation Annual Average Daily traffic (AADT) report. Providing the total annual traffic estimate divided by the number of days in the year, this booklet includes information such as the estimates of the percentage of the AADT made up by six different vehicle types ranging from passenger vehicles to double trailer trucks. This booklet also contains information on the Annual Average Weekday Traffic
(AAWDT) and Peak Hour/Peak Direction factors used by planners to formulate design criteria. This data will assist in determining the total traffic column as compared to the amount of hazardous materials traffic. This analysis can also include coordination and information sharing with the County’s Traffic Engineering section in Department of Public Works.

iii. Assessment of driver knowledge: Assisted by the North Carolina Highway Patrol and the North Carolina Department of Transportation, an assessment of driver knowledge, vehicle safety, hazardous materials regulatory compliance, and knowledge of shipping documents will be conducted. This involves interviewing drivers for specific knowledge points they are required to possess, inspection of vehicles with law enforcement partners that are carrying hazardous materials, and a review of the shipping papers. This information will be used to assist in the development of inspection awareness training and resources for drivers and will be entered into a database that will be maintained by the County at the conclusion of the study.

b. Selection of locations and facilities: New Hanover County Emergency Management, fire, law enforcement, personnel from Traffic Engineering, personnel from the ILM Airport, and personnel from the North Carolina State Ports will be requested to assist in selection of the most critical transportation routes. Additionally, contact with CSX and the pipeline operators in the area will be included to provide information on their infrastructure. This will include roadways, railways, pipeline locations, maritime routes, and airline transportation needs. The Successful Offer shall have contacts in place with the rail and pipeline operators to facilitate and expedite this process for this particular infrastructure. The current Tier 2 reports will be reviewed and evaluated to assist in selection of fixed facilities that may need to be included in the study. A subcommittee, within the LEPC, can assist with the Tier II reviews.

c. Provide a status update to the New Hanover County Emergency Planning Committee (LEPC) at the no later than the regularly scheduled November 18, 2020 meeting. Final Study: Once all data has been collected, a final report will be published. The report will include but not necessarily limited to, information relative to each transportation route and facility as provided. Including text, graphs, and charts, and overall picture of the findings will be presented. The final report will be in both electronic and paper formats, and a formal presentation of the findings will be made to the Local Emergency Planning Committee (LEPC) and the local hazardous materials response team at the regularly scheduled March 2021 LEPC meeting. (Deadline for project completion is February 28, 2021).

2. Review and update the existing Appendix H document in the County EOP.
3. Provide a briefing on both the CFS and the EOP appendix to the New Hanover County Local Emergency Planning Committee during the next scheduled LEPC meeting during the 2021 project closeout.
4. Develop educational materials that can be shared with interested stakeholders on general hazardous material awareness and preparedness. This can include printables, brochures, etc...
Section 4– Selection of Consultant

Selection will be based on:

1. Consultant’s knowledge of the subject
2. Consultant’s knowledge of Hazardous Materials preparedness, response, and recovery efforts as demonstrated through U.S. DOT and FEMA processes and how they apply to the subject
3. Consultant’s ability to provide and complete the tasks within the allotted timeframe.
4. Evidence of adequate staff capacity and capability to perform the tasks desired.
5. Evidence of having performed similar tasks in the past.
6. Positive and constructive reference reports.
7. Ability to execute all aspects of project and submit closeout report no later than February 28, 2021.
Consultant proposals must show that they and any participants have provided similar services to those specified and at a minimum include:

1. Vendor name and address
2. Brief history of operation and range of service capabilities
3. Name and resume of Project Director
4. Resumes of all principals and professional support staff involved, demonstrating qualifications and related experience and expertise.
5. No less than three (3) references including contact information and a brief description of the project service(s) provided.
6. Proposed work plan that includes the anticipated timeline for each element of the project.
7. Proposed not to exceed price for providing the outlined services, including travel expenses.
8. Within 15 days upon completion of the project, consultant will provide New Hanover County Emergency Management LEPC
   Payable the following items:
   a. Itemized invoice(s)
   b. Electronic copies of final CFS report and EOP appendix
   c. Two hard copies of the final CFS report and EOP appendix
Section 6—Federal Uniform Guidance

1. **Compliance with Federal Law.** If applicable, all federally funded projects, loans, grants, and sub grants whether funded in part or wholly, must be procured in a manner that conforms with all applicable Federal laws, policies, and standards, including those under the Uniform Guidance (2 C.F.R. Part 200).

2. **Equal Opportunity.**

   2.1 During the performance of this contract, Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

   2.2 Consultant will, in all solicitations or advertisements for employees placed by or on behalf of Consultant, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

   2.3 Consultant will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Consultant's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

   2.4 Consultant will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
2.5 Consultant will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

2.6 In the event of Consultant's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and Consultant may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

2.7 Consultant will include the provisions of this section in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. Consultant will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event Consultant becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, Consultant may request the United States to enter into such litigation to protect the interests of the United States.

3. Consultant shall comply with the following additional federal provisions:

3.1. Davis Bacon Act and Copeland Anti-Kickback Act.

21.1.1 Consultant and its subcontractors agree to comply with the Copeland “Anti-Kickback” Act (18 U.S.C. 874; 40 U.S.C. § 3145) as supplemented in Department of Labor regulations (29 C.F.R. Part 3). The Copeland Anti-Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the
compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA.

3.2 Consultant shall comply with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction)). See 2 C.F.R. Part 200, Appendix II, ¶ D. In accordance with the statute, Consultant must be pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, Consultant must be pay wages not less than once a week.

3.3 A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

4. **Contract Work Hours and Safety Standards Act**

4.1 Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of forty hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of forty hours in the work week.

4.2 **Overtime:** No contractor or subcontractors contracting for any part of the work under this Agreement which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such work week.

4.3 **Violation:** liability for unpaid wages; liquidated damages: In the event of any violation of the provisions of this section, Consultant and any subcontractors responsible therefore shall be liable to any affected employee for his unpaid wages. In addition,
such contractor and subcontractors shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of this Agreement in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of his standard work week of forty hours without payment of the overtime wages required by this Agreement.

4.4 Withholding for unpaid wages and liquidated damages: County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by Consultant or its subcontractors under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractors for unpaid wages and liquidated damages as provided in the clause set forth in this Agreement.

4.5 Subcontracts: Consultant or its subcontractors shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this Agreement.

5. Patent Rights: If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under this Agreement, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, County and Consultant agree to take actions necessary to provide immediate notice and a detailed report to FEMA. Unless the Government later makes a contrary determination in writing, irrespective of Consultant’s status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), County and Consultant agree to take the necessary actions to provide, through FEMA,
those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” 37 CFR, Part 401. Consultant agrees to include the above two paragraphs in each third party subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FEMA.

6. **Clean Water Act and Federal Water Pollution Control Act:**

6.1 Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

6.2 Consultant agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

6.3 Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

6.4 Consultant agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

6.5 Consultant agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

6.6 Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. and shall report each violation to County and understands and agrees that County will, in turn, report each violation as required to assure notification to an appropriate
Federal Emergency Management Agency, and an appropriate Environmental Protection Agency Regional Office.

6.7 Consultant agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

7. **Suspension and Debarment.**

7.1 This Agreement is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such Consultant is required to verify that none of Contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

7.2 Consultant must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

7.3 This certification is a material representation of fact relied upon by County. If it is later determined that Consultant did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

7.4 Consultant agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The Consultant or Consultant further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. **Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended).** Contractors who apply or Proposal for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any

9. **Procurement of Recovered Materials.**


9.2 The requirements of Section 6002 include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired by the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

9.3 In the performance of this contract, Consultant shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

i. Competitively within a timeframe providing for compliance with the contract performance schedule;

ii. Meeting contract performance requirements; or

iii. At a reasonable price.

Information about this requirement, along with the list of EPA-designate items, is available at EPA’s Comprehensive Procurement Guidelines web site, [https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program](https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program).
10. **Access to Records.** The following access to records requirements apply to this contract:

10.1 Consultant agrees to provide County, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of Consultant which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

10.2 Consultant agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

10.3 Consultant agrees to provide the FEMA Administrator or his authorized representative(s) access to construction or other work sites pertaining to the work being completed under this Agreement.

10.4 Consultant shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

10.5 Consultant will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

10.6 The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

10.7 Consultant acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to Consultant's actions pertaining to this Proposal.
1. **QUESTIONS CONCERNING THE PURCHASE ORDER:** Contact the Bill To Department shown on the purchase order.

2. **PURCHASE ORDER NUMBER:** The purchase order number must appear on all invoices, packing slips, correspondence, and bill of lading. The County will not be responsible for goods delivered without a purchase order.

3. **PRICE:** If prices or terms do not agree with your quotation, you must notify the ordering Department immediately. All prices are quoted **F.O.B. DESTINATION** unless specifically indicated otherwise.

4. **INVOICES:** All invoices are to be mailed to the Bill To Department. Each purchase order must be invoiced separately. Invoices for partial shipments will be accepted and final invoices should indicate completion of order. The Purchase Order Number should be referenced on all invoices.

5. **CASH DISCOUNTS:** All cash discounts will be effective from the date an invoice is received and approved by the County and not the date the invoice is printed by the vendor.

6. **PAYMENT TERMS:** The County agrees to pay all approved invoices Net Thirty (30) days from the date received and approved. The County does not agree to the payment of late charges or finance charges assessed by the seller for any reason. Invoices are payable in U.S. funds.

7. **TAXES:** New Hanover County is not Tax-Exempt. Prices shown on the County’s purchase orders do not include tax; however, all applicable taxes shall be paid by the County. Seller shall itemize taxes on the seller’s invoice. It should be noted that the County is exempt from Federal Excise Tax except as required to be paid by law.

8. **QUANTITY:** The specific quantity ordered must be delivered in full and will not be changed without the Purchasing’s consent. Any unauthorized quantity is subject to rejection and return at seller’s expense.

9. **FREIGHT AND PACKAGING:** Price quotations shall include freight, transportation, shipping, handling and similar charges. Collect freight shipments will be refused. The seller shall absorb any increase in rates becoming effective after the date hereof. The seller agrees to assume and pay all extra expense occurring on account of improper packaging.

10. **SERVICES PERFORMED:** All services rendered under this agreement will be performed at the Seller’s own risk and the Seller expressly agrees to indemnify and hold harmless New Hanover County, its officers, agents, and employees from any and all liability, loss or damage that they may suffer as a result of claims, demands, actions, damages or injuries of any kind or nature whatsoever by or to any and all persons or property.

11. **INSURANCE:** Contractor shall maintain at its own expense (a) Commercial General Liability Insurance in an amount not less than $1,000,000 per occurrence for bodily injury or property
damage; New Hanover County, shall be named as additional insured. (b) Professional Liability insurance in an amount not less than $1,000,000 per occurrence – if providing professional services; to include Environmental Professional, if applicable. (c) Workers Compensation Insurance as required by the general statutes of the State of North Carolina and Employer’s Liability Insurance not less than $500,000 each accident for bodily injury by accident, $500,000 each employee for bodily injury by disease, and $500,000 policy limit; (d) Commercial Automobile Insurance applicable to bodily injury and property damage, covering all owned, non-owned, and hired vehicles, in an amount not less than $1,000,000 per occurrence as applicable. (e) Pollution Liability insurance in an amount not less than $1,000,000 per occurrence, if applicable. Certificates of Insurance shall be furnished prior to the commencement of Services to: New Hanover County, 230 Government Center Drive, Suite 125, Wilmington, NC 28403.

12. APPLICABLE LAWS: By the acceptance of this order, seller represents that the goods covered by this order are in full compliance with all applicable local, state or federal laws and regulations and agrees to indemnify and defend New Hanover County against any loss, cost, liability or damage by reason of seller’s violation of any laws.

13. CANCELLATION: New Hanover County reserves the right to cancel this order, or any part thereof, at any time without penalty. Such cancellation may be based upon failure of the seller to comply with the terms and conditions of this transaction, failure to perform the work with promptness and diligence, failure to make shipment within the time specified or for any other reason which causes the seller not to perform as agreed.

14. ACCEPTANCE AND INSPECTION: All goods shall be subject to the County’s right of inspection and rejection. Risk of loss and title to all goods shall remain with the seller until acceptance has been made by the County. If goods are rejected, they will be returned at seller’s risk for credit or replacement at the County’s option and all handling and transportation expenses both ways shall be assumed by the seller. When goods have been rejected, the County shall have the right to cancel any unshipped portion of this order. Payment for supplies shall not constitute acceptance and is without prejudice to claims that the County may have against the seller.

15. WARRANTY: The seller expressly warrants that goods, covered by this order will conform to the specifications, drawings, or samples furnished by the County and shall be free from defects in material and/or workmanship and shall be merchantable. This warranty shall survive any inspection, delivery acceptance or payment by the County. The seller also warrants that the goods do not infringe any patent, registered trademark or copyright and agrees to hold New Hanover County harmless in the event of any infringement or claim thereof. Additionally, seller warrants that the goods are free and clear of all liens and encumbrances and that seller has a good and marketable title to the same.

16. HAZARDOUS CHEMICALS: The seller shall ensure that each container of a hazardous chemical is labeled, tagged or marked with information required by OSHA’s Hazard Communication Standard, Department of Transportation requirements, and any applicable EPA requirements.
17. **MATERIAL SAFETY DATA SHEETS (MSDS):** The seller shall ensure that New Hanover County is provided an appropriate current MSDS with or prior to the initial shipment of a hazardous chemical, and with or prior to the first shipment after the MSDS is updated.

18. **NON-DISCRIMINATION POLICY:** New Hanover County does not discriminate on the basis of race, color, sex, national origin, religion, age or disability. Any contractors or vendors who provide services, programs or goods to the County are expected to fully comply with the County’s non-discrimination policy.

19. **VERBAL AGREEMENT:** The County will not be bound by any verbal agreements.

20. **INDEPENDENT CONTRACTOR:** It is mutually understood and agreed the seller is an independent contractor and not an agent of New Hanover County, and as such, seller, his or her agents and employees shall not be entitled to any County employment benefits, such as but not limited to vacation, sick leave, insurance, worker’s compensation, pension or retirement benefits.

21. **GOVERNING LAW:** All terms and conditions shall be interpreted in accordance with the laws of the State of North Carolina.

22. **E-VERIFY COMPLIANCE:** As a condition of payment for services rendered under this agreement, Seller shall fully comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Further, if Seller provides the services to the County utilizing a subcontractor, Seller shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Seller shall verify, by affidavit, compliance with the terms of this section upon request by the County.

23. **DIVESTMENT FROM COMPANIES THAT BOYCOTT ISRAEL:** The vendor or contractor certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to NCGS 147-86.81. It is the responsibility of each vendor or contractor to monitor compliance with this restriction. Contracts valued at less than $1,000 are exempt from this restriction.

24. **UNIFORM ADMINISTRATIVE REQUIREMENTS:** By acceptance of this Purchase Order, the Vendor/Contractor agrees to comply with all applicable provision of Title 2, Subtitle A, Chapter II, Part 200-Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards contained in Title 2 CFR § 200 et seq.
Section 8– Proposal Format

NEW HANOVER COUNTY
REQUEST FOR PROPOSALS
HAZARDOUS COMMODITY FLOW STUDY

Deadline for Receipt of Proposals: TUESDAY, NOVEMBER 10, 2020 @ 5:00 PM EST

Proposals shall be submitted in the format outlined herein. Respondents should describe in
detail the services proposed; how those services will be accomplished for each component; and
specifics regarding design and integration. Respondents should also identify the cost of
providing each service category and if appropriate, include service level options. The
respondent may include any relevant information, attachments, or exhibits to further elaborate
on the proposal.

Proposal Format:

I. Consultant Contact – List the name, address, fax number, email address, and phone
   number of the Consultant’s authorized representative. Consultant’s authorized
   representative shall be empowered to make binding commitments for the
   Consultant’s firm.

II. Consultant Profile – Provide a description of the company including a brief company
    history and prospects. Include the location of your organization’s headquarters, the
    year the organization was formed, and ownership structure.

III. Project Schedule – Provide a full project schedule for the proposed solution which
     should include an estimated duration of each task with estimated dates with the
     assumption that the contract is awarded December 15, 2020.

IV. Cost – The proposal should be broken down by phases and types of work. The
    following cost information is to be provided:
    a. Hourly rate for professional services, including task description.
    b. Individual Equipment Costs
    c. All other potential costs for the proposed solution.

V. Include a sample copy of firm’s contract if necessary

VI. Include the Certification Regarding Lobbying form.

VII. Include the Certification Regarding Debarment form

VIII. Include the Minority & Women Business Enterprise (MWBE)

IX. Include the Signature Page (Execution)
(To be submitted with all Proposals or offers exceeding $100,000; must be executed prior to Award)

CERTIFICATION REGARDING LOBBYING

The undersigned ______________________ certifies, to the best of his or her knowledge and belief, that:

(Consultant)

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any persons for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding to any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.]

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 for each such expenditure or failure.]

The Consultant, ______________________, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Section A 3801 et seq., apply to this certification and disclosure, if any.

__________________________
Date

__________________________
Signature of Consultant’s Authorized Official

__________________________
Printed Name and Title of Contractors Authorized Official
(To be submitted with all Proposals)

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY and VOLUNTARY EXCLUSION

LOWER TIER COVERED TRANSACTION

(1) The prospective lower tier participant (Consultant/Contractor) certifies, by submission of this Proposal or Proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) The prospective Consultant/Contractor also certifies by submission of this Proposal or Proposal that all subcontractors and suppliers (this requirement flows down to all subcontracts at all levels) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(3) Where the prospective lower tier participant (Consultant/Contractor) is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this Proposal or Proposal.

The lower tier participant (Consultant/Contractor), ________________________, certifies or affirms the truthfulness and accuracy of this statement of its certification and disclosure, if any.

______________________________  ________________________________
Date                             Signature of Consultant’s Authorized Official

______________________________
Printed Name and Title of Contractors Authorized Official
(Submit with Proposal)

Minority & Women Business Enterprise (MWBE) Program

FORM

A. Authorized Representative
I HEREBY AFFIRM THAT:
I am [name] ___________________________, [title] ___________________________, and the duly authorized representative of [Business Name] ___________________________, and that I possess the legal authority to make this statement on behalf of myself and the Business for which I am acting.

B. Affirmation Regarding MWBEB Program Acknowledgement and Compliance
I FURTHER AFFIRM THAT:
I am aware of and intend to comply with the County’s MWBE Program. As such [check one]:

_____ The Business is certified as a woman- or minority-owned business by an accepted agency. (Attach proof certification)

_____ The Business is a woman- or minority-owned business but has not been certified by an accepted agency. (Attach document of ownership such as articles of incorporation, current business license, K-1 of the most recent business tax return.)

_____ The Business is not a woman- or minority-owned business; however, the Consultant acknowledges the MWBE policy and if it should become necessary to subcontract some portion of the work at a later date or obtain materials or services in conjunction with this solicitation, the Consultant will institute good faith efforts to comply with all requirements of the MWBE program in providing equal opportunities to MWBEs.

Signature: _____________________________________________  Date: __________
In compliance with this Request for Proposals, and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are Proposal, at the prices set for each item within the time specified herein. By executing this proposal, the undersigned Vendor certifies that this proposal is submitted competitively and without collusion (N.C.G.S. 143-54), that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the North Carolina General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (N.C.G.S. 143-59.2), and that it is not an ineligible Vendor as set forth in N.C.G.S. 143-59.1. False certification is a Class I felony. Furthermore, by executing this proposal, the undersigned certifies to the best of Vendor’s knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency. As required by N.C.G.S. §143-48.5, the undersigned Vendor certifies that it, and each of its sub-contractors for any Contract awarded as a result of this RFP, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system.

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<thead>
<tr>
<th>CONSULTANT:</th>
<th>P.O. BOX:</th>
<th>ZIP:</th>
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<tr>
<td>STREET ADDRESS:</td>
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<td>PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE:</td>
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<td>PRINT NAME &amp; TITLE OF PERSON SIGNING ON BEHALF OF CONSULTANT:</td>
<td>FAX NUMBER:</td>
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<tr>
<td>CONSULTANT’S AUTHORIZED SIGNATURE:</td>
<td>DATE:</td>
<td>E-MAIL:</td>
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This supplement is used in conjunction with the New Hanover County Emergency Management Basic Emergency Operations Plan (EOP).
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Introduction

Hazardous materials are part of our everyday life. They are used in the manufacturing of wood, metal, glass and plastic products. Hazardous materials help to keep our homes clean and pest free. They keep our cars running and lubricated. Every chemical, even oxygen and water, can be dangerous in sufficient quantities or in the presence of other non-compatible chemicals. While commercially packaged household cleaners and pesticides are briefly mentioned in this plan, it is the large quantities used in industry and shipped on our New Hanover County roads and waterways that are of most concern. In sufficient quantities, the uncontrolled release of a common chemical, such as chlorine or ammonia, can cause environmental damage, serious injury, and death.

The incidents of releases are very low due to prevention efforts initiated by chemical handlers as well as Federal, State and local regulations. Every chemical, over a certain threshold, must be handled in a certain prescribed manner. Each shipment must be packaged, labeled, containerized, handled, vented, or pumped in accordance with strict regulations. Drivers and processors must be specially trained; each must be certificated and/or licensed to handle the chemicals in their charge.

By accident or by criminal act, hazardous materials can escape their controls and be released into the environment. Hazardous materials (HazMat) come in all three physical states, liquid, gas, or solids. To complicate the hazard, some HazMat will change state depending on the temperature, atmospheric pressure or other influences. It becomes necessary to recover as much of the released product as possible, move or shelter populations until nature provides relief, or chemically change it in-situ to reduce its potential harm to life, limb and the environment.

Responding to releases of hazardous materials is dangerous and requires specialized training and equipment. Private response companies are outfitted to carryout long-term response and remediation. Government agencies, such as the Regional Response Teams are tasked with securing the hazard until the arrival of the private contractors.

The New Hanover County Emergency Operations Plan is an all hazard plan that provides EOC staffing guidance in respect to HazMat releases in Emergency Support Function (ESF) #10. This plan is designed to provide background and additional information to assist the New Hanover County and community leadership in the decision-making processes associated with a HazMat release.

Note: For 2018, the Hazardous Materials Supplement has been reformatted for easier readability and printing. The Glossary and Health Hazards have been moved to the front, and checklist forms, emergency phone numbers, and resources have been moved to the back for stand-alone printing. Blank pages have been inserted to allow double-sided printing for continuity.
Glossary

Absorption
The passing of a substance into the circulatory system of the body. Also used specifically to refer to entry of toxicants through the skin.

Acute Exposure
An exposure to a toxic substance which occurs in a short or single time period.

Acute Toxicity
Any poisonous effect produced by a single short-term exposure. The LD$_{50}$ of a substance (the lethal dose at which 50 percent of test animals succumb to the toxicity of the chemicals) is typically used as a measure of its acute toxicity.

Additive Effect
A biological response to exposure to multiple chemicals which is equal to the sum of the effects of the individual agents.

Adsorption
The bonding of chemicals to soil particles or other surfaces.

Aerosol
A solid particle or liquid droplet suspended in air. An aerosol is larger than a molecule and can be filtered from the air.

Antagonism
The situation in which two chemicals interfere with each other’s actions, or one chemical interferes with the action of the other.

Aquifer
An underground bed, or layer, of earth, gravel, or porous storage that contains water.

Asphyxiates
Chemicals that starve the cells of an individual from the life-giving oxygen needed to sustain metabolism.

Biodegradable
Capable of decomposing quickly through the action of microorganisms.

Biomagnification
The tendency of certain chemicals to become concentrated as they move into and up the food chain.

Boiling Point
The temperature at which a liquid will start to become a gas, and boil. A chemical with a low boiling point can boil and evaporate quickly. If a material that is flammable also has a low boiling point, a special fire hazard exists.

Carcinogen
A chemical or physical agent that encourages cells to develop cancer.

Central Nervous System Depressants
Toxicants that deaden the central nervous system (CNS), diminishing sensation.
**CERCLA**
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980—the Federal statute that authorized “Superfund.” Administered by EPA, the law provides funding for cleanups and emergency response actions for hazardous substances at the worst hazardous waste sites in the United States, CERCLA is also significant because it set the first criteria for notification of emergencies involving hazardous substances. Superfund regulates abandoned waste disposal sites; for active disposal site regulation, see RCRA.

**CHEMTREC**
Chemical Transportation Emergency Center, a service operated by the Chemical Manufacturers Association to provide information and other assistance to emergency responders.

**Chronic Exposure**
Process by which small amounts of toxic substances are taken into the body over an extended period.

**Command Post**
A centralized base of operations established near the site of a hazardous materials incident.

**Corrosive**
A chemical that destroys or irreversibly alters living tissue by direct chemical action at the site of contact.

**Decontamination**
The process of removing or neutralizing contaminants that have accumulated on personnel and equipment. This process is critical to health and safety at hazardous waste incidents.

**Dermal Exposure**
Exposure to toxic substances by entry through the skin.

**Dose**
The quantity of a chemical absorbed and available for interaction with metabolic processes.

**Epidemiology Studies**
Investigation of factors contributing to disease or toxic effects in the general population.

**Evaporation Rate**
The rate at which chemical changes into a vapor. A chemical that evaporates quickly can be a more dangerous fire or health hazard.

**Exercise**
A simulated emergency condition carried out for the purpose of testing and evaluating the readiness of a community or organization to handle a particular type of emergency.

**Explosive**
A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperatures.

**Extremely Hazardous Substance (EHS)**
Anyone of over 300 hazardous chemicals on a list compiled by EPA to provide a focus for State and local emergency planning activities.
Fate
The transport and transformation of a pollutant.

Hazard Class
A group of materials, as designated by the Department of Transportation, that share a common major hazardous property such as radioactivity or flammability.

Hazardous Materials Response Team (HMRT)
A team of specially trained personnel who respond to a hazardous materials incident. The team performs various response actions including assessment, firefighting, rescue, and containment; they are not responsible for cleanup operations following the incident.

Incident Commander
The person in charge of on-scene coordination of a response to an incident, usually a senior officer in a fire department.

Inversion
An atmospheric condition caused by a layer of warm air preventing cool air trapped beneath it from rising, thus holding down pollutants that could otherwise be dispersed.

Irritant
Chemicals which inflame living tissue by chemical action at the site of contact, causing pain or swelling.

LD$_{50}$
The calculated dosage of a material that would be fatal to 50% of an exposed population (Lethal Dose 50%).

Leachate
Material that pollutes water as it seeps through solid waste.

Leaching
The process by which water dissolves nutrient chemicals or contaminants and carries them away, or moves them to a lower layer.

LEPC
Local Emergency Planning Committee.

LOAEL
The Lowest Observed Adverse Effect Level, i.e., the lowest dose which produces an observable adverse effect.

Medium
The environmental vehicle by which a pollutant is carried to the receptor (e.g., air, surface water, soil, or groundwater).

Melting Point
The temperature at which a solid material changes to a liquid. Solid materials with low melting points should not be stored in hot areas.

SDS (Safety Data Sheet)
A worksheet required by the U.S. Occupational Safety and Health Administration (OSHA) containing information about hazardous chemicals in the workplace. SDSs are used to fulfill part of the hazardous chemical inventory reporting requirements under the Emergency Planning and Community Right-to-Know Act.
**Mutagen**
A chemical or physical agent that induces a permanent change in the genetic material.

**NOAEL**
No Observable Adverse Effect Level.

**Organic Compound**
Chemicals that contain carbon. Volatile organic compounds vaporize at room temperature and pressure. They are found in many indoor sources, including many common household products and building materials.

**OSHA**
The Occupational Safety and Health Administration, part of the Department of Labor.

**Pathway**
A history of the flow of a pollutant from source to receptor, including qualitative descriptions of emission type, transport, medium, and exposure route.

**PEL**
Permissible Exposure Limits set by OSHA as a guide to acceptable levels of chemical exposure.

**Percent Volatile**
The percentage of a chemical that will evaporate at ordinary temperatures. A high volatile percentage may mean there is more risk of explosion, or that dangerous fumes can be released. Evaporation rates are a better measure of the danger than the percent volatile measure.

**pH**
The pH is a measure of how acidic or caustic a chemical is, based on a scale of 1 to 14. A pH of 1 means the chemical is very acidic. Pure water has a pH of 7. A pH of 14 means the chemical is very caustic. Both acidic and caustic substances are dangerous to skin and other valuable surfaces.

**Poison**
A chemical that, in relatively small amounts, is able to produce injury by chemical action when it comes in contact with a susceptible tissue.

**RCRA**
The Resource Conservation and Recovery Act (of 1976). A Federal statute which establishes a framework for proper management and disposal of all wastes. Generation, transportation, storage, treatment, and disposal of hazardous wastes are all regulated under this Act.

**Risk Assessment**
Broadly defined as the scientific activity of evaluating the toxic properties of a chemical and the conditions of human exposure to it, with the objective of determining the probability that exposed humans will be adversely affected. Its four main components are:

1. **Hazard Identification** - Does the agent cause the effect?
2. **Dose-Response Assessment** - What is the relationship between the dose and its incidence in human beings?
3. **Exposure Assessment** - What exposures are experienced or anticipated, and under what conditions?
4. **Risk Characterization** - The total analysis producing an estimate of the incidence of the adverse effect in a given population.
Runoff
Water from rain, snow melt, or irrigation that flows over the ground surface and returns to streams.

SARA

SERC
State Emergency Response Commission.

Solubility in Water
An indicator of the amount of a chemical that can be dissolved in water, shown as a percentage or as a description. A low percent of volubility (or a description of “slight” solubility or “low” solubility) means that only a small amount will dissolve in water. Knowing this may help firefighters or personnel cleaning a spill.

Specific Gravity
A comparison of the weight of the chemical to the weight of an equal volume of water. Chemicals with a specific gravity of less than 1 are lighter than water, while a specific gravity of more than 1 means the chemical is heavier than water. Most flammable liquids are lighter than water.

Synergistic Effect
A biological response to exposure to multiple chemicals which is greater than the sum of the effects of the individual agents.

Systemic Toxicants
Chemical compounds that affect entire organ systems, often operating far from the original site of entry.

Teratogen
A material that produces a physical defect in a developing embryo.

Threshold
The lowest dose of a chemical at which a specific measurable effect is observed. Below this dose, the effect is not observed.

Title III
The third part of SARA, also known as the Emergency Planning and Community Right-to-Know Act of 1986.

TLV
Threshold Limit Values, which are the calculated airborne concentrations of a substance to which all workers could be repeatedly exposed eight hours a day without adverse effects.

Totally Encapsulated Suits
Special protective suits made of material that prevents toxic or corrosive substances or vapors from contacting the body.

Toxicity
The degree of danger posed by a substance to animal or plant life.

Toxicology
The study of the adverse effects of chemicals on biological systems, and the assessment of the probability of their occurrence.
Transformation
The chemical alteration of a compound by processes such as reaction with other compounds or breakdown into component elements.

Transport
Hydrological, atmospheric, or other physical processes that convey pollutants through and across media from source to receptor.

Vapor Density
The measure of the heaviness of a chemical's vapor as compared to the weight of a similar amount of air. A vapor density of 1.0 is equal to air. Vapors that are heavier than air may build up in low-lying areas, such as along floors, in sewers, or in elevator shafts. Vapors that are lighter than air rise and may collect near the ceiling.

Vapor Pressure
The measure of how quickly a chemical liquid will evaporate. Chemicals with low boiling points have high vapor pressures. If a chemical with high vapor pressure spills, there is an increased risk of explosion and a greater risk that workers will inhale toxic fumes.

Volatilization
Entry of contaminants into the atmosphere by evaporation from soil or water.

Workers Right-to-Know
Legislation mandating communicating of chemical information to employees. A regulatory initiative by OSHA, and an antecedent to Community Right-to-Know.
Health Hazards of Selected Extremely Hazardous Substances*

ACROLEIN
Acrolein is a flammable and reactive liquid, colorless or yellowish, with an intense, disagreeable smell. It is used for making plastics, drugs, and tear gas. Contact can severely irritate and burn the eyes and skin. Breathing acrolein vapor can irritate the throat and lungs, causing coughing, severe shortness of breath, and fluid in the lungs (pulmonary edema). Exposure can also produce dizziness, nausea, headache, and in higher concentrations may lead to unconsciousness and death. High levels or repeat exposure can cause permanent lung damage. Acrolein may cause mutations (genetic changes that can be passed on to future generations).

ACRYLONITRILE
Acrylonitrile is a flammable and reactive liquid, clear or slightly yellowish in color, with a faint odor. It is used to make synthetic fibers and polymers. Acute exposure irritates the eyes, nose, throat and lungs. High exposure levels can cause weakness, headache, confusion, nausea, vomiting, and collapse. At the highest exposure levels fluid build-up in the lungs (pulmonary edema) may lead to death. Chronic exposure may interfere with the thyroid gland. Acrylonitrile is a probable human carcinogen.

AMMONIA
Ammonia is a corrosive colorless gas with a strong odor. It is used in making fertilizer, plastics, dyes, textiles, detergents, and pesticides. Acute ammonia exposure can irritate the skin; burn the eyes, causing temporary or permanent blindness; and cause headaches, nausea, and vomiting. High levels can cause fluid in the respiratory system (pulmonary or laryngeal edema), which may lead to death. Chronic exposure damages the lungs; repeated exposure can lead to bronchitis with coughing or shortness of breath.

CARBON DISULFIDE
Carbon disulfide is a flammable colorless or faintly yellow liquid with a strong, disagreeable odor. It is used in manufacturing viscose rayon, cellophane, carbon tetrachloride, and flotation agents. Acute exposure can severely irritate the eyes, skin, and nose, and can cause headaches, nausea, dizziness, unconsciousness, and death. Chronic exposure can damage the developing fetus, and may cause spontaneous abortions in women and sperm abnormalities in men. Repeat exposures can also cause nervous system damage including tingling, weakness, and severe mood, personality, and mental changes that can be long lasting (for months or years).

CHLORINE
Chlorine is a greenish-yellow gas with a strong, irritating odor. It is used in making other chemicals, as a disinfectant, in bleaching, and for purifying water and sewage. Acute exposure can severely burn the eyes and skin, causing permanent damage, and may cause throat irritation, tearing, coughing, nose bleeds, chest pain, fluid build-up in the lungs (pulmonary edema), and death. Chronic exposure can damage the teeth, and irritate the lungs, causing bronchitis, coughing, and shortness of breath. A single high exposure can permanently damage the lungs.

CHLORINE DIOXIDE
Chlorine dioxide is a reddish-yellow gas or reddish-brown liquid used to bleach textiles, flour, and wood pulp, to treat water, and for other uses. Breathing chlorine dioxide gas can irritate the lungs, nose, and throat, causing coughing, nosebleeds, and chest pain. Higher levels may cause fluid to build up in the lungs (pulmonary edema) leading to death. Long-term or repeat exposure can cause cough, phlegm, and other breathing problems, and can lead to permanent lung damage.
CHLOROFORM
Chloroform is a colorless liquid used in making dyes, drugs, and pesticides. Acute exposure to chloroform can irritate and burn the skin, eyes, nose, and throat, and cause dizziness, lightheadedness, headache, confusion, and irregular heartbeat which may lead to death. Chloroform probably causes cancer and may cause birth defects. Chronic chloroform exposure can damage the skin, liver, kidneys, and nervous system.

DIMETHYL DICHLOROSILANE
Dimethyl dichlorosilane is a colorless liquid that is flammable and corrosive. It is used to make silicones. Direct contact can severely irritate and burn the skin and eyes. Breathing dimethyl dichlorosilane can irritate the lungs, including fluid build-up (pulmonary edema) at high exposures.

EPICHLOROHYDRIN
Epichlorohydrin is a reactive colorless liquid with a slightly irritating, chloroform-like odor. It is used to make plastics, resins, and glycerin. Acute exposure to epichlorohydrin vapor irritates the eyes, nose, bronchial tubes, and lungs. High levels can chemically burn the lungs or cause dangerous fluid build-up, which may lead to death. Eye contact may cause permanent damage, and skin contact can cause painful blistering which may be delayed in onset for minutes or hours. Chronic exposure can damage the kidneys, liver, and lungs. Epichlorohydrin is a probable human carcinogen and may decrease fertility in males.

ETHYLENE OXIDE
Ethylene oxide is a colorless gas that is highly flammable, reactive, and explosive. It is used to make antifreeze, polyesters, and detergents, and is used for industrial sterilization. Acute exposure can irritate the eyes, skin, nose, throat, and lungs, and may cause shortness of breath, headache, nausea, vomiting, diarrhea, drowsiness, weakness, and loss of muscle control. Higher exposure levels may cause loss of consciousness, fluid in the lungs (pulmonary edema), and death. Chronic exposure to ethylene oxide may cause cancer and birth defects, as well as damage to the liver, kidneys, and nervous system.

ETHYLENEDIAMINE
Ethylene diamine is a flammable and corrosive colorless liquid with an ammonia-like odor. It is used as a solvent, a stabilizer for rubber latex, and in antifreeze solutions. Breathing ethylenediamine can irritate the nose, throat, and lungs, and contact can irritate and blister the skin, leading to recurrent skin allergy. High exposure may cause liver, kidney and lung damage, including lung allergy.

FORMALDEHYDE
Formaldehyde is a flammable, colorless gas with a pungent, suffocating odor. It is used in manufacturing plastics and other chemicals, such as adhesive resins in particleboard, plywood, foam insulation, and other products. Acute exposure irritates and burns the skin, eyes, nose, mouth, and throat. Higher levels can cause a build-up of fluid in the lungs (pulmonary edema) or spasm in the windpipe, either of which may be fatal. Chronic exposure may cause both an asthma-like allergy and bronchitis with symptoms of coughing and shortness of breath. Formaldehyde causes cancer of the nasal passages in animals and is considered a probable human carcinogen.

HYDROGEN CHLORIDE (HYDROCHLORIC ACID)
Hydrogen chloride is a corrosive colorless to slightly yellow gas with a strong odor. It is used in metal processing, analytical chemistry, and in making other chemicals. Acute exposure to hydrogen chloride can cause severe burns of the skin and eyes, leading to permanent damage and blindness. Breathing hydrogen chloride vapor irritates the mouth, nose, throat, and lungs, causing coughing, shortness of breath, fluid build-up in the lungs (pulmonary edema), and possibly death. Chronic exposure damages the lungs and may erode the teeth.
HYDROGEN CYANIDE (HYDROCYANIC ACID)
Hydrogen cyanide is a flammable and reactive pale blue liquid or gas with a bitter, almond-like odor. The gas is used in industry to kill rodents and insects. The liquid is used in making other chemicals such as acrylates and acrylonitrile. Acute exposure can irritate and burn the skin, eyes, and throat, and can cause dizziness, headache, and nausea. High levels can lead rapidly to convulsions or sudden death. Chronic exposure damages the thyroid gland and nervous system.

HYDROGEN FLUORIDE (HYDROFLUORIC ACID)
Hydrogen fluoride is a corrosive colorless fuming liquid or gas with a strong irritating odor. It is used in etching glass and in making other chemicals, including gasoline. Breathing the vapor causes extreme respiratory irritation (with cough, fever, chills, and tightness) that may be fatal. Contact can severely burn the skin and eyes, resulting in permanent eye damage or blindness. Long-term exposure may damage the liver and kidneys, and causes fluorosis, with symptoms of weight loss, malaise, anemia, and osteosclerosis.

PHOSGENE
Phosgene is a colorless gas, or a clear to yellow volatile liquid used in making pesticides, resins, polyurethane, dyes, and other chemicals. Phosgene is highly corrosive. Short-term exposure can irritate and severely burn the skin and eyes causing permanent damage. Breathing phosgene can irritate the nose, throat, and lungs; higher levels can cause fluid to build up in the lungs (pulmonary edema), a medical emergency. Repeated exposures to even very low levels can cause permanent lung damage (including emphysema, bronchitis).

PHOSPHOROUS TRICHLORIDE
Phosphorous trichloride is a highly corrosive fuming liquid, colorless to yellow in color, with a pungent odor. It is used to help make many industrial chemicals and products, including pesticides (e.g., rat poison), plastics, chlorinated compounds, smoke bombs, fertilizers, and gasoline additives. Exposure can corrode and damage the skin, eyes, throat, and lungs. Contact during ordinary industrial use can cause death or permanent injury.

PROPYLENE OXIDE
Propylene oxide is a flammable and reactive liquid that is clear or colorless. It is used as a fumigant and in making lubricants, detergents, and other chemicals. Acute exposure can severely burn the skin and eyes. Inhaling the vapor can irritate the nose, throat, and lungs, and cause difficulty breathing. Exposure can lead to headache, dizziness, and passing out. Propylene oxide is a probable carcinogen and a mutagen (capable of causing mutations in genetic material).

SULFUR DIOXIDE
Sulfur dioxide is a colorless gas with a sharp pungent odor. It may be shipped and stored as a compressed liquefied gas. Sulfur dioxide is used in the manufacture of sulfuric acid, sulfur trioxide, and sulfites; in solvent extraction; and as a refrigerant, among other uses. Acute exposure irritates the eyes and air passages. High exposures to the skin and eyes can cause severe burns and blindness, and breathing high levels can lead to permanent lung damage and death.

SULFUR TRIOXIDE
Sulfur trioxide is a corrosive colorless liquid that fumes in the air forming sulfuric acid vapor or mist. Its health effects in the air are essentially those of sulfuric acid (and are similar to sulfur dioxide and to oleum). Sulfur trioxide vapor can severely irritate and burn the skin, eyes, throat, and lungs. Eye damage can include blindness. Breathing the vapor can lead to choking, spasm, and pulmonary edema. Exposure can cause bronchitis, emphysema, and permanent lung damage.
SULFURIC ACID
Sulfuric acid is an oily liquid that is highly corrosive. It is used in fertilizers, chemicals, dyes, petroleum refining, etching and analytical chemistry, and in making iron, steel, and industrial explosives. Breathing sulfuric acid mist can irritate the lungs; high levels can cause death through a dangerous build-up of fluid in the lungs (pulmonary edema). Contact can severely burn the skin and eyes. Repeat exposure can cause erosion and pitting of the teeth, stomach upset, nose bleeds, tearing of the eyes, emphysema, and bronchitis.

TITANIUM TETRACHLORIDE
Titanium tetrachloride is a colorless to light yellow liquid that has a penetrating acid odor. It is used to make titanium pigments, iridescent glass, artificial pearls, and as a catalyst in polymerization. Titanium tetrachloride is highly irritating to the skin, eyes, and mucous membranes. Acute exposure can burn the skin, eyes, throat, and lungs. Chronic exposure can lead to chronic bronchitis, wheezing, and build-up of fluid in the lungs.

TOLUENE-2, 4-DIISOCYANATE
Toluene-2, 4-Diisocyanate is a colorless to pale yellow liquid with a strong fruity odor. It is used to make polyurethane foams, elastomers, and coatings. Contact can irritate and burn the eyes and skin, and breathing vapor can irritate the nose, throat, and lungs, leading to coughing, chest tightness, and shortness of breath. High levels can lead to fluid in the lungs (pulmonary edema). Chronic exposure may cause concentration and memory problems. Toluene-2,4-Diisocyanate is a probable carcinogen.

VINYL ACETATE
Vinyl acetate is a flammable and reactive colorless liquid with a sharp sweet odor. It is used in making polyvinyl resins. Acute exposure to vinyl acetate can irritate the eyes, nose, throat, and skin, and cause shortness of breath. High levels can cause fatigue, irritability and dizziness. Prolonged contact can blister and burn the skin.

* Extremely hazardous substances are defined by the U.S. EPA under the Clean Air Act [112(r)].
* Health hazard information sources include:
  • New Jersey Hazardous Substance Fact Sheets http://web.doh.state.nj.us/rtkhsfs/indexfs.aspx
  • Environmental Protection Agency Hazardous Substance Fact Sheets https://www.epa.gov/haps/about-health-effects-fact-sheets

Compiled by: The Working Group on Community Right-to-Know, Washington, DC 20003
Situation/Assumptions

Situation

1. Several industries use the Cape Fear River to bring HazMat into or through the county. The State Port Authority in Wilmington receives inter-modal containers with a large variety of packaged and bulk HazMat. The Atlantic Intra-Coastal Waterway (AICW) provides waterborne transportation of hazardous cargoes that pass-through county enroute to destinations throughout the east coast. Millions of pounds of HazMat are destined for New Hanover County or pass through each year. Some of those products are listed in the following table.

<table>
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<tr>
<th>Acrolein</th>
<th>Epichlorohydrin</th>
<th>Propylene Oxide</th>
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<td>Acrylonitrile</td>
<td>Ethylene Oxide</td>
<td>Sulfur Dioxide</td>
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<td>Ammonia</td>
<td>Ethylenediamine</td>
<td>Sulfur Trioxide</td>
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<td>Carbon Disulfide</td>
<td>Formaldehyde</td>
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<td>Chlorine</td>
<td>Hydrogen Chloride</td>
<td>Titanium Tetrachloride</td>
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<td>Chlorine Dioxide</td>
<td>Hydrogen Cyanide</td>
<td>Tolune-2,4-Diisocyanate</td>
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<td>Chlorofrom</td>
<td>Hydrogen Fluoride</td>
<td>Vinyl Acetate</td>
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<td>Dimethyl Dichlorosilane</td>
<td>Phosphorous Trichloride</td>
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(Selected Extremely Hazardous Substances (EHS))

The health hazards associated with these chemicals was addressed in the preceding pages.

2. The threat of a major disaster involving hazardous materials has escalated due to the increase in everyday use and transportation of chemicals by the various segments of our population.

3. The results of a hazardous material incident could include the 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 exposure.

4. Evacuation, a protective measure, could isolate evacuees from their homes for an indefinite period.

5. Victims of a hazardous material incident may require unique or special medical care not typically required 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 of the substance.

Assumptions

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

2. A hazardous material incident may require the public to shelter-in-place or to evacuate depending upon conditions at the time of the emergency.

3. Most, but not all, people affected by a hazardous material incident will follow instructions and shelter-in-place or relocate to designated shelters.

4. Public notification/warning and evacuation, if required, will be in accordance with the procedures described in Emergency Support Function #2 of the Basic Emergency Operations Plan.
5. The local jurisdiction must respond to the incident in the initial phase without assistance from outside the jurisdiction. Emergency response agencies will take appropriate actions to prevent or minimize the spread of the material, provide early first aid as necessary, and manage the incident scene with emphasis toward safety of the public and responding personnel.

6. Planning and training prior to an incident will significantly reduce the risk to personnel.

7. The hazardous material involved in an incident can be identified within a reasonable time period by the owner of the facility or the vehicle, by the shipping documents, by the properties of the material itself, or by information provided pursuant to SARA, Title III or the N.C. Right-to-Know Act.

8. Emergency response personnel are knowledgeable in the use of available resources.

9. The current edition of the U.S. DOT Emergency Response Guidebook, alone or in combination with other information sources is used as a guide for initial protective action at incidents involving hazardous materials.

Concept of Operations

1. The level of response required for an incident is determined by:
   a. The quantity and the toxic effects of the material involved in an actual imminent release.
   b. The population and/or property threatened.
   c. The type and availability or protective equipment required for the released material.
   d. The probable consequences should no immediate action be taken.

2. Depending upon the threat posed by the incident, protective measures initiated for the safety of the public could include in-place shelter, evacuation, and isolation of the contaminated environment.

3. Incidents are classified according to level of risk according to the Incident Commander's assessment.
   
   **Level I (Potential Emergency Condition)** is an incident which can be controlled by the first response agencies, does not require evacuation of other than the involved structure or immediate outdoor area, and does not suggest that major environmental damage will occur.

   **Level II (Limited Emergency Condition)** is an incident that involves 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 jurisdiction's resources.

   **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 probably require a large-scale evacuation. Level III includes an incident requiring a combination of expertise or resources from local, state, federal and private agencies/organizations.

4. Response procedures for each level of incident will be according to local policies and procedures in compliance with worker safety standards.
5. This plan recognizes that a hazardous material incident can change with time, and necessitate escalating the response to a higher level, or down-grading the response to lower levels as the situation is controlled.

6. When responding to an incident where hazardous materials are known to be stored, the responders will assume the involvement of the most toxic substance at that location until otherwise informed.

7. The New Hanover County Hazardous Materials and Emergency Planning Commission (LEPC) has been established at the county level to identify the magnitude of the local hazard, assess the vulnerability of the community to that hazard, and provide planning guidance for emergency response. 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 may have a representative on the committee. At each covered facility, as defined by SARA, Title III, Section 302, a Facility Emergency Coordinator will be identified to serve as the point of contact as defined by SARA, Title III, Section 303(d)(1). This Facility Emergency Coordinator will provide the necessary emergency response information on the facility to the planning committee.

**Organization and Assignment of Responsibilities**

General: The head of each agency involved in hazardous materials emergency response is responsible for the safety of its personnel. Training, emergency response procedures, and medical surveillance shall comply with the provisions of the North Carolina Hazardous Waste Operations and Emergency Response Standard 13 NCAC 7F.0101 (which adopted 29 CFR 1910 OSHA standards with state amendments). Topics addressed shall include but not limited to the dangers of hazardous materials, emergency response techniques, protective materials, protective clothing and equipment, and medical monitoring of personnel. In this regard, the head of each agency is, therefore, responsible for developing, maintaining, and updating training programs and standard operating procedures.

1. Jurisdiction Responsibilities:
   a. **Chairman, County Commissioners**
      1) Nominate a Local Emergency Planning Committee (LEPC) as identified in Title III of the Superfund Amendments and Reauthorization Act of 1986 and in accordance with the policies of the North Carolina Emergency Response Commission (NCERC). The LEPC will be appointed by the NCERC. The LEPC shall consist of representatives as required by federal law and NCERC policy.
      2) Encourage cooperation between the Local Emergency Planning Committee, local government agencies, facilities, and other applicable organizations.

   b. **County Manager**
      1) Ensure, through the Chairman of the LEPC, that county facilities with hazardous materials are properly identified, are reporting as required, and have appointed a Facility Emergency Coordinator to represent them on the LEPC.
      2) Provide administrative support to the Local Emergency Planning Committee as required.
c. Emergency Management Director

1) Coordinate exercises and tests of the emergency plan in accordance with current requirements and concurrence of the LEPC. An exercise concerning the release of hazardous materials shall be conducted at least annually.

2) Support the LEPC in maintaining liaison with facility emergency coordinators to ensure availability of current information concerning hazards and response to an incident.

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

4) Serve as the Community Emergency Coordinator as identified in SARA, Title III.

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

d. Incident Commander (IC)

1) Activate the pre-plan and 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 of exposure.

4) Assess the situation and communicate the results to responding agencies, the EOC, and facility representatives.

5) Appoint a Safety Officer and then other staff members as the situation requires in accordance with the jurisdiction’s Incident Command System.

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

e. NHC Environmental Management Director

1) In addition to other responsibilities identified in this plan and other directives, the Health Department will assist in the 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 Director

1) In addition to other responsibilities identified in this plan, the EMS Director shall develop procedures with assistance from facility owners and operators, in accordance with local protocols, for:

   a. Treatment of contaminated patients.

   b. Decontamination of patients and equipment.
c. Direction and control of mass casualty incidents as a result of the release of hazardous materials in coordination with the Emergency Management Director.

2. Local Emergency Planning Committee (LEPC)

   1) Ensure fulfillment of responsibilities for local emergency planning pursuant to SARA, Title III and the policies of the North Carolina Emergency Response Commission.

   2) Assess the current level of prevention, preparedness, and response capability within the jurisdiction.

   3) Review existing plans for overlap, useful information and ideas.

   4) Conduct an analysis of hazardous materials within the jurisdiction to identify the hazards, vulnerability, and risk.

   5) Develop procedures to ensure perpetual chemical hazard identification and risk assessment program within the jurisdiction.

   6) Ensure the development and distribution of public awareness programs.

   7) Ensure public access to information and the emergency operations plan regarding hazardous materials within the jurisdiction.

   8) Ensure development of procedures for notification and warning in the event of an incident involving hazardous materials.

   9) Identify individuals and groups within risk areas who have special needs such as transportation, advanced medical care, and special warning (sight or hearing impaired).

   10) Ensure that training for all responders to a hazardous material incident (including management) is in accordance with applicable policies, procedures and standards.

   11) Ensure that agencies develop and maintain Standard Operating Procedures for hazardous materials response operations.

   12) Identify resources needed for response to a hazardous material incident from public and private sources and make recommendations to the County officials about emergency response matters.

   13) Ensure an ongoing program for plan implementation, maintenance, training, and exercising.

   14) Ensure compliance with the provisions of Title III, Superfund Amendments and Reauthorization Act of 1986.

   15) Assure coordination of planning efforts between jurisdictions (municipalities, counties, facilities, etc.) including the development of notification/warning, response, and remediation procedures for covered facilities.
3. State Responsibilities

a. The State Emergency Management Plans and Operations staff, in accordance with state statutes, is responsible for support to the local jurisdictions. The State Emergency Response Team (SERT) is available, as required, for assistance in the event of an incident. Most state agencies (especially those with a response role such as Environmental Management, Solid and Hazardous Waste, State Highway Patrol, National Guard, and others) are available to assist local jurisdictions through the State Emergency Response Organization. (SERO)

b. The Area Coordinator has been empowered by the Secretary of Crime Control and Public Safety to act on his behalf as prescribed in G.S. 166A and is responsible for local assistance, when requested, during an incident and will be the single on-scene coordinator of state resources.

4. 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. Supplemental information on each identified facility is available in E-Plan.

5. Facility Emergency Coordinator

a. Ensure that reportable information required by SARA, Title III is provided to the LEPC in a timely manner. In accordance with NCERC policy and where required, Tier II report forms shall be submitted in lieu of Tier I forms.

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

c. Ensure that facility personnel are trained in emergency response procedures, including but not limited to, determining that a release has occurred, notifying appropriate facility personnel and public officials, and initiating protective and/or hazard suppression activities.

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

e. Provide a technical representative to the Incident Commander and the EOC during an incident.


a. The provisions of this Multi-Hazard Emergency Operations Plan (EOP) 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 (highways, railways, pipelines, etc.) of hazardous materials, identified by the LEPC during the hazard analysis process, are listed in the situation statements of the basic plan and in the individual facility information data.
c. Other sources of guidance may be utilized during a transportation incident involving hazardous materials. The first responders to an incident should follow their agency’s standard operating procedures for the initial actions involving a transportation related incident.

**Direction and Control**

The overall direction and control of emergency activities in a disaster situation is vested with the Chairman, County Commissioners. On site management will be established by the incident commander. The entire county emergency response force, including activation of the EOC, may not be required to handle every type of emergency involving a hazardous material.

**Continuity of Government**

Lines of succession for agencies and officials involved in a hazardous material incident are in accordance with established procedures.

**Administration and Logistics**

1. 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 Director and the Local Emergency Planning Committee will ensure, through the use of information provided pursuant to Sections 302, 304, 311, 312, and 313 of SARA, Title III and other knowledge, that all identified hazards are evaluated based on available resources and program funding.

2. Equipment and supplies for response to a hazardous material incident will be provided initially from the responding agencies’ resources. Additional resources will be obtained through mutual aid agreements with other agencies, local jurisdictions 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. Equipment and supplies for the EOC will be provided by the Emergency Management Director.

3. Training programs for emergency responders of the county will be through individual agency in-service training, community college courses, and other offerings of related training.

4. Exercise schedules for this plan are developed and maintained by the emergency management office. Exercises shall be in accordance with local, state, and federal policies and, when possible, coordinated with the New Hanover County Department of Emergency Management. The types of exercises shall include, but not limited to, table-top, functional, and full-scale exercises. There must be at least one full-scale exercise every 3 years. An actual occurrence may be substituted for an exercise provided it adequately tested response functions addressed in this plan and a critique of the event was conducted.

**Plan Development and Maintenance**

1. The Emergency Management Director will coordinate with the LEPC, the designated Facility Emergency Coordinators, and other applicable agencies in the development and maintenance of this plan.

2. This Hazardous Materials Plan is designed to be used as an integral part of the multi-hazard NHC Basic Emergency Operations Plan.
3. The Local Emergency Planning Committee will approve and review this plan on at least an annual basis. Changes will be submitted to the committee when necessary. Copies will be made available to the public, each response agency, and the N.C. Division of Emergency Management through the Area Office.

Authorities and References


3. N.C. General Statutes, Chapter 166A.

4. New Hanover County Emergency Haz/Mat and Emergency Management Ordinance.

5. DOT Emergency Response Guidebook (DOT P 5800.4).


9. Title 49 of the Code of Federal Regulations (49CFR)

10. USCG Southern Coastal Area Contingency Plan (ACP)

11. Emergency Response to Terrorism Job Aid (DOJ, FEMA, and National Fire Academy)

12. US EPA Regional Response Plan (Region IV)

13. Wilmington Fire Department Emergency Operations SOG (August 2014)
History of Hazardous Material releases in New Hanover County

As of April 2015, the National Response Center in Washington DC has received and catalogued 1008 reports of the release of oil and hazardous substances into the air, water or land in New Hanover County since 1995. The following table lists the materials found in the report. Most of these are transportation related incidents. Many are caused by human error (i.e. improper hose connections, failure to monitor the transfer, etc.) Details concerning these reports can be found at The Right-to-Know Network: http://www.rtk.net/

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Preparedness

SARA III (Emergency Planning and Community Right-to-Know)

In 1980, Congress passed the Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA) also known as the Superfund. In 1986, the CERCLA was amended and reauthorized to include the Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA directs certain facilities that handle hazardous materials to make a report (Tier II) to the Local Emergency Planning Committee (LEPC) and/or other designated officials. This requirement was further codified under North Carolina General Statute NCGS 95-173. The Tier II report provides details of, among other things, the types and quantities of certain hazardous materials. This provides the community and emergency responders with the foreknowledge of hazards they may encounter because of a fire, explosion or other incident that may release hazardous materials stored on-site. With this data, HazMat planners can develop scenarios to anticipate the effects of a catastrophic release and develop mitigation and response plans.

In New Hanover County, the information gathered in the Tier II reports is collected by New Hanover County Emergency Management and made available to the LEPC and the public. In 2008, New Hanover County began only accepting Tier II reports submitted using E-Plan database proved by the University of Texas of Dallas. (Visit www.erplan.net). Electronic Tier II reports can be downloaded into the Cameo-Marplot-Aloha program to automatically map the chemicals in the county as well as establish evacuation and/or shelter-in-place scenarios.

E-Plan Submission Screen Capture
Computer Aided Management of Emergency Operations (CAMEO)

The CAMEO program was designed to assist emergency responders such as fire departments and HazMat teams in responding to and managing a HazMat incident. CAMEO contains a chemical library with Response Information Data Sheets (RIDS) to provide the responder with general information to assist with decision making processes. Once the chemical is identified it can be mapped into the ALOHA program. In ALOHA, the chemical data is augmented with weather and source information and a plume model is developed. The plume model gives officials an idea of which direction a release is or may go and the concentrations of the chemical expected in the plume. Once ALOHA generates the plume model, it is superimposed on a map of the county to show which part of the community is affected. When the data is current, it will show the locations of schools, hospitals, nursing homes, business districts, water treatment plants, or any other location deemed important by the program manager.
The incident commander can use the information to affect an evacuation and/or shelter-in-place and set up a hot zone, warm zone, and cool zone and identify safe location for the incident command post. Only trained and qualified personnel are authorized to enter the hot zone and then only if wearing the appropriate Personal Protective Equipment (PPE).
This example shows the plume overlay for 2000 gallons of Chlorine released instantaneously at the East end of the Isabella Holms Bridge. The plume is blown by a 15-knot wind out of the Northwest. The plume extends for about 1.25 miles to the Southeast. The red shaded area shows the extent of the IDLH concentration (10 PPM) of Chlorine. The outlined area shows the extent of the TLV concentrations (.5 PPM) of Chlorine.
Plume Atlas

Once the Tier II data is loaded into CAMEO, it is a simple matter to use the program to run “worst case” scenarios based on the chemicals and quantities identified by the facilities. Currently, the New Hanover County Airborne Release Chemical Atlas (on file at NHC Emergency Management) identifies several plume models based on the four hypothetical seasonal weather situations. Each scenario is based on the historically average prevailing weather data for the season. In accordance with the National Weather Service in Wilmington, the following information applies:

<table>
<thead>
<tr>
<th>Season</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Fall</th>
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</thead>
<tbody>
<tr>
<td>Months</td>
<td>Dec - Feb</td>
<td>Mar - May</td>
<td>Jun - Aug</td>
<td>Sep – Nov</td>
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<tr>
<td>Temp F°</td>
<td>46°</td>
<td>63°</td>
<td>78°</td>
<td>63°</td>
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<tr>
<td>Humidity</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
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<td>Wind °T/Speed</td>
<td>225°/15kts</td>
<td>225°/15kts</td>
<td>225°/15kts</td>
<td>45°/15kts</td>
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</table>

The Hazard Assessment committee of the LEPC is developing an updated list of the “Top 10” hazardous materials in New Hanover County. Once that is completed, the Plume Atlas will be updated using those chemicals and issued as a change to this HazMat Plan. In the interim, six of the original hazardous materials from the Airborne Release Chemical Atlas are evaluated using the latest version of CAMEO.

This section provides plume models for a catastrophic (instantaneous) release of each of the listed hazardous material under each of the four seasonal scenarios.

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Acetone</td>
<td>47,000 gallons</td>
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<tr>
<td>Ammonia, Anhydrous</td>
<td>7,640,000 gallons</td>
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<tr>
<td>Chlorine</td>
<td>150 pounds</td>
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<td>Hydrofluoric Acid, Anhydrous</td>
<td>5700 gallons</td>
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<tr>
<td>Nitric Acid</td>
<td>63,000 gallons</td>
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<tr>
<td>P-Dichlorobenzene</td>
<td>31,000 gallons</td>
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</table>

Due to the relatively stable year-round climate of New Hanover County, you may note that the plume model for each of the four seasons have very similar dispersion patterns. The most significant variables are the wind speed and direction. The data displayed in the panels below are placed on the Marplot map by manually selecting the source point. The ALOHA and Marplot program share data to place the plume on the map in the appropriate scale. As the user zooms in on the map, the scale of the plume changes in relation.
Geographical Information System (GIS) Overlay

The GIS overlay shows static locations where a potential exists for HazMat releases in New Hanover County. As electronic Tier II reporting data is collected additional icons for HazMat storage sites will be included.
Plan Exercises

New Hanover County Emergency Management in conjunction with New Hanover County Fire Services Administration, Wilmington Fire Department and the Regional Response Team are developing an exercise schedule to test the capabilities of this and other related HazMat plans.

The following exercise cycle will be used to ensure each aspect of the plan is exercise on a regular basis with a full-scale deployment every third year.

<table>
<thead>
<tr>
<th>Exercise type</th>
<th>Semi-annually</th>
<th>Annually</th>
<th>Triennially</th>
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<tbody>
<tr>
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After each exercise, an evaluation report with 'lessons learned' will be prepared with input from all stakeholders. The plans will be updated as necessary based on the evaluation report.
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Response

Specific tactical response techniques are found in the Fire Department's and Regional Response Team's Standard Operating Guidelines.

Incident Command System

As stated in the New Hanover County Emergency Operations Plan, the Incident Command System (ICS) is the approved method for all coordinated responses within the county. The first official party to arrive on scene will establish the incident command until relieved by proper authority. The Incident Command System grows and shrinks as needed by the response. In an incident involving significant quantities of hazardous materials it may be necessary to fully implement the Incident Command. Consult the New Hanover County Emergency Management Incident Command Plan for detailed information.

Public Warning/Notification

After the HazMat team or Emergency Management has identified the extent of the hazard it may be necessary to notify the public to avoid the area or to evacuate/shelter-in-place to avoid exposure to the released material. New Hanover County has several systems in place to conduct a public notification.

1. **Dialogic (reverse 911)** – The Dialogic Communicator is a comprehensive hardware/software system to provide mass telephone notification of the hazard. It can be set up to dial all numbers in a community or linked to a Geographical Information System called GeoNotify to alert all the listed telephones within a certain radius or area downwind of the incident. Dialogic is accessed by the Director of Emergency Management or his designee. This system only works with listed telephone numbers. Unlisted telephones or those with telemarketing filters will not receive calls from Dialogic.

2. **Emergency Alert System (EAS)** – The EAS is the system you hear tested occasionally on radio and television. It provides three alert tones then is followed by specific information on where to tune your radio or television to receive official information concerning the emergency. The information is provided by the National Weather Service, US Geological Survey, Director of Emergency Management and others.

3. **Government Television CH-8/CH-13** – The two government operated television stations in this area are controlled by the City of Wilmington and New Hanover County. The Public Information Officers (PIO) for these two jurisdictions will broadcast emergency information.
over these stations.

4. Cable Audio Interrupt - New Hanover County Emergency Management can override the audio portion of the television cable feed from Time Warner Cable and Charter Cable. The voice announcement will provide important information. This system will not work for satellite subscribers.

5. NOAA Weather Radio – The National Weather Service in Wilmington will assist New Hanover County Emergency Management by sending a weather alert with voice information concerning the hazard. Many citizens keep weather alert radios in their homes. The weather radio automatically comes on and provides emergency information.

6. Emergency Services Backup Alert Routing – One of the oldest and reliable forms of public notification. Emergency vehicles with Public Address (PA) speakers will patrol the affected area and make announcements over their loudspeaker systems. The vehicles will stop at each quarter (1/4) mile in populated areas and at each house or group of houses that are more than 1/4 mile apart.

   NOTE: In heavily populated areas responders may need to stop more frequently than 1/4 miles. The emergency vehicle will notify the public of the situation and recommend protective action. Each route should be run twice if possible to ensure receipt of the initial warning by all members of the community. The second run, or back-run, will be to confirm alert and notification. Back-runs need only stop at houses that are dark at night or where it is apparent that people are not complying with instructions. If necessary, door-to-door alerting will be accomplished during the second run.

7. Facility alarms – Those living near facilities that handle certain dangerous chemicals should be aware of the emergency signals used by the facility. These facilities broadcast a specific tone or series of tones to denote certain hazardous situations and whether or not to evacuate the area.

Response Considerations

1. Safety of the public and the responders is paramount. Unless certain, always approach a HazMat incident as if it were a deliberate act.

2. Always be alert for secondary devices

3. Always approach from upwind and uphill if at all possible.

4. Prevent HazMat from flowing into drains or surface waters.

5. Walking/driving over spilled material may push it into the substrate – causing additional damage and further complicating cleanup.

Use of the Fire Department

The Wilmington Fire Department or New Hanover County Fire Service will provide first response to HazMat incidents in the zone. The fire services will establish command and take immediate steps necessary to protect life, limb and property (i.e. rescue victims, suppress flames, protect exposures, apply foam, etc.). Firefighters/EMTs will not enter the hot zone.

Use of the Regional Response Team (RRT)
The State of North Carolina has placed seven Regional hazardous materials response teams around the state. RRT-2 is tasked with responding to incidents in the region surrounding New Hanover County. Requests for RRT must go through the NC State Emergency Operations Center in Raleigh. The RRT will provide emergency response to stabilize the situation (i.e. secure the discharge, prevent the spread of the materiel, protect storm drains etc.). Once the scene is stabilized the responsible party's response contractor will conduct the remediation.

**Traffic Control Points**

Once the extent of the incident is defined it may be necessary to establish a perimeter to prevent citizens from entering an area that would cause them harm or interfere with emergency operations. The incident commander will determine the location of the traffic control points. In the unincorporated areas of the county, the Sheriff will control traffic access. In the municipalities, the local Police Departments will take the lead. All agencies may be assisted via mutual aid agreements with other local jurisdictions and/or the Highway Patrol.

**Activation of the New Hanover County Emergency Operations Center (EOC)**

If the incident exceeds the abilities or resources of the responders and requires the coordination of multiple agencies/jurisdictions, the EOC may be activated. The incident commander will contact NHC Emergency Management to request assistance. In all cases, the EOC will be activated at the discretion of the New Hanover County Director of Emergency Management.
Recovery

Cost Recovery

During each day of the operation and at the completion of the HazMat incident, all New Hanover County agencies involved in the response will establish costs associated with the response. All costs will be based on an establish Standard Rate schedule and/or actual costs for rented or purchased supplies/equipment in support of the response. Completed cost recovery documentation will be presented to the responsible party for payment.

Each agency involved with the HazMat response must generate their own cost documentation. The Standard Rate schedule for New Hanover County Emergency Management is on file with NHC Emergency Management.

Reimbursement from CERCLA

If no responsible party exists or the responsible party is unwilling or unable to pay, cost recovery documentation for up to $25,000 may be presented to the US Environmental Protection Agency (EPA) for reimbursement. However, only specific costs are allowed in accordance with Title 40 of the Code of Federal Regulations Section 310, specifically those costs over and above normal expenses (i.e. overtime, equipment decon, laboratory expenses, etc.) Since the EPA requires specific documentation, the Finance Section Chief of the Incident Command should determine early in the response whether the spiller is taking responsibility or if a request for EPA reimbursement is likely.

If the EPA assumes control of the incident, the funding mechanisms change. The local government agencies are “hired” by the Federal On-Scene Coordinator using a document called the Pollution Removal Funding Authorization (PFRA). At that point, the $25,000 cap no longer applies.
Mitigation

Strategies

Household Hazardous Waste – New Hanover County Environmental Management collects household hazardous waste items daily. Please refer to the following website for a complete list of acceptable hazardous materials http://recycling.nhcgov.com/services/household-hazardous-waste/.

New Hanover County LEPC website – The website http://em911.nhcgov.com/about-us/local-emergency-planning-committee/ provides information to the citizens of New Hanover County regarding LEPC meeting minutes, news for the county and links to EPCRA information.

Strategies to Consider

Outer Loop – The State of North Carolina is currently constructing a road that will offer a bypass around Wilmington for Hwy 17 traffic. It is possible to require the use of this new stretch of highway to prevent transient HazMat cargoes from passing through areas of higher population density, namely the City of Wilmington.

Overnight/Transient Parking – Require that hazardous cargoes be delivered to their destination upon arrival in the population area. Those trucks not able to deliver their cargoes will be restricted from parking in residential or other specified areas. Transient vehicles must not park/loiter in population areas.
New Hanover County Hazardous Materials Ordinance

ARTICLE IV. COST RECOVERY FOR HAZARDOUS MATERIALS EMERGENCIES

Sec. 17-121. Purpose.

This article shall provide procedures for recovering cost incurred by the county for city and county assistance in abating hazardous materials emergencies pursuant to state code.

(Code 1978, § 6.7-31)

Sec. 17-122. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Abatement delivery notice means a letter given to the responsible party informing the party that a hazardous materials incident has occurred or threatens to occur where the party may be financially responsible. (See exhibit A)

Expenses means the actual labor cost of governmental personnel, including workers' compensation benefits, fringe benefits, administrative overhead, cost of equipment, cost of equipment operation, cost of materials, cost of disposal, and the cost of any contract labor, material and technical services. Expenses shall also mean the out-of-pocket expenses for volunteers.

Hazardous materials emergency means a sudden and unexpected release of any substance that, because of its quantity, concentration, or physical, chemical or infectious characteristics, present a direct and immediate threat to public safety or the environment, and requires immediate action to respond, recover, and mitigate from such unexpected release.

(Code 1978, § 6.7-32)

Cross reference—Definitions generally, § 1-2.

Sec. 17-123. Recovery authorization and procedure.

The county is empowered to recover from any person who caused hazardous material emergency expenses incurred by the city or county agencies directly associated with a response to a hazardous materials emergency pursuant to the following procedure:

1. The director of emergency management or his designee shall determine responsibility for the emergency and notify the responsible person by mail of the county's determination of responsibility and the cost to be recovered.

2. The notice shall specify that the determined responsible person may appeal the county's decision before a hearing officer designated by the chairman of the board of county commissioners and establish a date by which the notice of appeal shall be filed. The appeal date shall be no less than 15 days from the date of the notice.

3. If the determined responsible person appeals the determination, the hearing officer shall hold a public hearing to consider any issues raised by the appeal, at which hearing the appealing person and the county shall be entitled to present evidence in support of their respective positions.

4. The hearing officer shall, after the hearing, make a written final determination to the responsible person.
Sec. 17-124. No admission of liability.

The payment of expenses determined owing under this article does not constitute an admission of liability or negligence in any legal action for damages.

Sec. 17-125. Enforcement; action to recover costs.

(a) If the person determined to be responsible for the repayment of hazardous material emergency cost fails to make payment to the county within 30 days after a final administrative determination, the county may initiate legal action in the nature of a debt collection, to recover from the determined responsible parties the cost determined to be owing, including the county's reasonable attorney's fees.

(b) Any and all costs incurred by the county in the abatement of a nuisance under the provisions of this article shall constitute a lien against the property upon which such nuisance existed, which lien may be filed with the tax administrator and collected in the same manner as provided for the collection of ad valorem taxes. Such lien shall be notice to all persons from the time of its filing with the tax administrator and shall bear interest at the legal rate thereafter until satisfied.

Secs. 17-126—17-160. Reserved.

FOOTNOTE(S):

--- (3) ---


--- (4) ---

Editor's note— Exhibit A of the ordinance adopted Nov. 19, 1990, from which this article formerly derived, is not set out in this article but is on file in the offices of the county.
Abatement Notice:

Gentlemen:

This letter is to inform you that a hazardous material or negligently caused fire incident has occurred/threatens to occur ____________________________ (location) for which you may be financially responsible. Under federal, state or local statues or ordinances, the County Commissioners of New Hanover County has an interest in the incident and may take or cause to be taken, appropriate action to minimize the damages that may be caused by the incident.

If a hazardous materials incident or negligently caused fire has occurred or occurs in the future, you are advised that the discharge of a harmful quantity of material is a violation of federal, state and local laws or ordinances. Under these laws the person responsible for the incident or property owner is obligated to undertake removal action. If he refuses to take this action, he is financially responsible for any action taken by New Hanover County. If you undertake removal, the adequacy of your actions may be determined by the NHC Department of Emergency Management its designee, or other appropriate federal or state agencies.

As long as your actions are adequate, the County will simply monitor your progress and provide any guidance necessary.

If at any time it is determined that you are not taking appropriate action, the County will assume responsibility. You will then be held responsible for all actual cost incurred by New Hanover County.

For any further information concerning this matter, please contact Steven Still, Director of Emergency Management & 911 at 910-798-6900.

Sincerely,

Acknowledgement of receipt of this letter is not an admission of guilt or responsibility.

________________________________________
(Date)

Signature
THIS PAGE INTENTIONALLY LEFT BLANK
# Emergency and Informational Phone Numbers

## Emergency Numbers

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Police, Fire, or Emergency Medical Services</strong></td>
<td><strong>Dial 911</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Hanover County Department of Emergency Management</td>
<td>1-910-798-6900</td>
<td>1-910-798-6904</td>
<td></td>
</tr>
<tr>
<td>N.C. Division of Emergency Management*</td>
<td>Operations Section (24 hrs. /day)</td>
<td>1-919-733-3867</td>
<td>1-800-858-0368 Fax: 1-919-733-7554 Email: <a href="mailto:ktaylor@ncem.org">ktaylor@ncem.org</a></td>
</tr>
<tr>
<td>National Response Center</td>
<td>(For CERCLA List Chemical Spills/Transportation Emergencies)</td>
<td>1-919-733-3556 Fax: 1-919-733-9796</td>
<td></td>
</tr>
<tr>
<td>Coast Guard Sector North Carolina</td>
<td>1-910-772-2200 Fax: 1-919-772-2205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.C. Department of Environmental Quality</td>
<td>1-910-796-7215 (M-F 8-5) 1-919-807-6308 Alternate #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pesticide Emergency Reaction Team*</td>
<td>(To Report Pesticide Spills, Fires. NC Dept. of Agriculture)</td>
<td>1-919-733-3556 Fax: 1-919-733-9796</td>
<td></td>
</tr>
<tr>
<td>Poison Control Center- North Carolina</td>
<td>National Number (Connects to Closest)</td>
<td>1-800-848-6946</td>
<td>1-800-222-1222</td>
</tr>
<tr>
<td>CHEMTREC</td>
<td>24-hour Chemical Emergency Information Service)</td>
<td>1-800-424-9300</td>
<td></td>
</tr>
<tr>
<td>Occupational Safety and Health Division, N.C. Department of Labor</td>
<td>(To report a work-related fatality or catastrophe)</td>
<td>1-800-625-2267 or 919-779-8560 (M-F) 1-919-733-3333 after hours</td>
<td></td>
</tr>
</tbody>
</table>

## Information Numbers

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Local Emergency Planning Committee-</td>
<td>New Hanover County</td>
<td>Fax#: 1-910-798-6904</td>
<td></td>
</tr>
<tr>
<td>N.C. Emergency Response Commission (SERC)</td>
<td>(Information on SARA Title III)</td>
<td>1-800-858-0368</td>
<td>1-919-733-7554 Fax: 1-919-733-7554</td>
</tr>
<tr>
<td>Emergency Planning and Community Right-to-Know (EPCRA Information Center (Select option #4)</td>
<td>1-800-424-9346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazard Communication and Emergency Response Standards, OSH Division, N.C. Department of Labor</td>
<td>1-919-856-4770</td>
<td>1-800-321-6742</td>
<td></td>
</tr>
<tr>
<td>Hazardous Waste Section, Solid Waste Management Division</td>
<td>1-919-707-8200</td>
<td>1-877-623-6748</td>
<td></td>
</tr>
<tr>
<td>Underground Storage Tanks, Division of Waste Management</td>
<td>1-919-707-8200</td>
<td>1-877-623-6748</td>
<td></td>
</tr>
</tbody>
</table>
NEW HANOVER COUNTY HAZARDOUS MATERIALS  
And  
EMERGENCY PLANNING COMMITTEE  
EMERGENCY RELEASE OR SPILL NOTIFICATION REPORT  
(Section 304)  
{ } ACTUAL { } FOLLOW UP  
ASSISTANCE NEEDED CHECK { } YES { } NO  
{ } EXERCISE { } CALLING FOR RESPONSIBLE PARTY

### Responsible Party Information

<table>
<thead>
<tr>
<th>Business Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City/State/Zip:</td>
<td></td>
</tr>
<tr>
<td>Name &amp; Phone of Emergency Contact at Facility</td>
<td></td>
</tr>
<tr>
<td>Phone#:</td>
<td></td>
</tr>
<tr>
<td>Organization Type:</td>
<td></td>
</tr>
</tbody>
</table>

If NOT calling for Responsible Party (Release observed from another facility):

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone#:</td>
<td></td>
</tr>
<tr>
<td>Company:</td>
<td></td>
</tr>
<tr>
<td>Position:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City/State/Zip:</td>
<td></td>
</tr>
</tbody>
</table>

### Location of Incident (Plant Site):

<table>
<thead>
<tr>
<th>Nearest City:</th>
<th>Distance of Nearest City:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latitude:</td>
<td>Longitude:</td>
</tr>
<tr>
<td>Milepost or River Mile (if spill to river):</td>
<td></td>
</tr>
</tbody>
</table>

Is this release confined on-site?  [ ] YES  [ ] NO  
Assistance need:  [ ] YES  [ ] NO  If yes please specify type of assistance:

| Does this release have off-site potential:  [ ] YES  [ ] NO  |
|---------------------------------------------|-----------------|
| Assistance need: [ ] YES [ ] NO             |

Does this release have off-site evacuation potential?  [ ] YES [ ] NO

Date of Incident:  Begin: am/pm  END: am/pm

New Hanover County  
Emergency Operations Plan (Appendix H)  
June 2018  
H-47
<table>
<thead>
<tr>
<th>Organizations Notified</th>
<th>To request a copy of NRC report contact: Jennifer Smith or Chris Tant</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Response Center:</td>
<td>1-800-424-8802 Incident #:</td>
</tr>
<tr>
<td>Contact Person:</td>
<td></td>
</tr>
<tr>
<td>NHC Emergency Management:</td>
<td>Date:</td>
</tr>
<tr>
<td>Contact Person:</td>
<td></td>
</tr>
<tr>
<td>NCEM Operations (24 Hrs):</td>
<td>Date:</td>
</tr>
<tr>
<td>Contact Person:</td>
<td></td>
</tr>
<tr>
<td>NC DEQ – Water Releases</td>
<td>Date:</td>
</tr>
<tr>
<td>Contact person:</td>
<td>910-796-7215 (Oil spills &amp; Wastewater)</td>
</tr>
<tr>
<td>NC DEQ - Air Releases</td>
<td></td>
</tr>
<tr>
<td>FIRE Station: On Duty Battalion Chief</td>
<td>Date:</td>
</tr>
<tr>
<td>(County)</td>
<td>Contact Person:</td>
</tr>
<tr>
<td>Other Agency Notified:</td>
<td>Date:</td>
</tr>
<tr>
<td>Contact Person:</td>
<td></td>
</tr>
<tr>
<td>Other Agency Notified:</td>
<td>Date:</td>
</tr>
<tr>
<td>Contact Person:</td>
<td></td>
</tr>
<tr>
<td>On-Scene Weather:</td>
<td></td>
</tr>
<tr>
<td>Wind: Speed ________ mph or kts Direction: ________</td>
<td></td>
</tr>
<tr>
<td>Sky: (Clear, cloudy, thunderstorms etc.) _____________ Visibility ____________ miles</td>
<td></td>
</tr>
<tr>
<td>Temperature: ___*F Humidity: ___%</td>
<td></td>
</tr>
<tr>
<td>*remember: NE wind</td>
<td></td>
</tr>
<tr>
<td>DATE OF RELEASE:</td>
<td></td>
</tr>
<tr>
<td>Chemical Name (or Trade Name):</td>
<td></td>
</tr>
<tr>
<td>CAS Number(s):</td>
<td></td>
</tr>
<tr>
<td>Is Chemical on Extremely Hazardous Substance (302) List:</td>
<td></td>
</tr>
<tr>
<td>Is Chemical Release Reportable</td>
<td></td>
</tr>
</tbody>
</table>
Under CERCLA 103(a):

| Physical State Stored: | [ ] YES | [ ] NO |
| Time of Release: | [ ] YES | [ ] NO |
| Duration of Release: [ ] SOLID | [ ] LIQUID | [ ] GAS |
| Physical State Stored: | [ ] YES | [ ] NO |
| Quantity Released: [ ] Ongoing | [ ] Terminated |
| Quantity Released: [ ] SOLID | [ ] LIQUID | [ ] GAS |

If Spill to Surface Water:

| Quantity in Surface Water: |
| Source: |
| Storage Tank/Container Type: |
| Tank Capacity: |

(Reportable Hazardous Component)

| Media Released to: [ ] Land | [ ] Air | [ ] Water |

POSSIBLE FACTORS CONTRIBUTING TO RELEASE (IF KNOWN)

[ ] Equipment Failure [ ] Operator Error [ ] Faulty Process Design
[ ] Training Deficiencies [ ] Unusual Weather Conditions
[ ] Transportation Accident [ ] Other

ACTIONS TAKEN

[ ] Containment [ ] Dilution/Neutralization [ ] Hazard Removal
[ ] Decontamination of Persons/Equipment
[ ] Evacuation [ ] ON SITE [ ] OFF SITE Numbered Evacuated:
[ ] Diversion of Release to Treatment or Recovery
[ ] System Shutdown
[ ] Monitoring
[ ] Other

KNOWN OR ANTICIPATED HEALTH EFFECTS OF RELEASE

Acute or Immediate:

Chronic or Delayed:

Total Injuries Resulting from Release:

Total Hospitalizations Resulting from Release:

Name of Receiving Hospital and Ambulance Service:

Total Fatalities Resulting from Release:

ADVICE REGARDING MEDICAL ATTENTION FOR EXPOSED INDIVIDUALS:
### ADDITIONAL INFORMATION ABOUT THE RELEASE

(e.g. media into which chemical was released, danger to fish or wildlife, public water supply intakes, or well fields:

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
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</tbody>
</table>

[ ] Supplement to follow (MSDS, Press Release, Plume Model, Preliminary Disposal Plan and Disposal Location)

<table>
<thead>
<tr>
<th>Was there any damage:</th>
<th>[ ] YES</th>
<th>[ ] NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage Costs ($)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DESIGNATED PUBLIC INFORMATION OFFICER AND TELEPHONE NUMBER:

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted information is true, accurate and complete:

___________________________________
Signature of Reporting Representative

Date

Reporting Facility Representative (Print or Type):

___________________________________
EPA FOLLOWUP LETTER

____________________, 20__

Certified Mail

US EPA - Region IV
Atlanta Federal Center
61 Forsyth Street, S. W.
Atlanta, GA  30303 - 8960
Attention:  Reportable Emissions Section

Subject:   Release Report – __________,20____ (Date)
           ______________Site   (NRC Report No. ______________)

Dear Sir or Madam:

This letter serves as a written notification regarding a release that occurred at the ______________site on (Date). The release occurred______________. The National Response Center (NRC) was called to report a possible reportable release ______________ on ______________, 20__.  

Initial release notifications, as provided in the Summary Table below, were made to the appropriate agencies on ______________, 20__.

Summary of Incident:

The following is a listing of EPCRA written notification requirements and responses for each of the notifications made on ______________, 20__.

40 CFR 355.40 (b)(1)-(3) Notice Requirements

355.40 (b)(1) The owner or operator of a facility subject to this section shall immediately notify the community emergency coordinator for the local emergency planning committee of any area likely to be affected by the release and the State emergency response commission of any State likely to be affected by the release:

As summarized in the table below, the facility reported the release to:
355.40(b)(2) The notice required under this section shall include the following to the extent known at the time of notice and so long as no delay in notice or emergency response results.

355.40 (b)(2)(i) The chemical name or identity of any substance involved in the release:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>Hazard Class</th>
</tr>
</thead>
</table>

355.40 (b)(2)(ii) An indication of whether the substance is an extremely hazardous substance:

355.40 (b)(2)(iii) An estimate of the quantity of any such substance that was released into the environment:

355.40 (b)(2)(iv) The time and duration of the release:

Current reports indicate the release began at approximately __________ am/pm and lasted for approximately ___ hours.

355.40 (b)(2)(v) The medium or media into which the release occurred:

355.40 (b)(2)(vi) Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals:

355.40 (b)(2)(vii) Proper precautions to take as a result of the release, including evacuation:
355.40 (b)(2)(viii) The names and telephone number of the person or persons to be contacted for further information:

Name:
Title:
Address:
Telephone:

355.40 (b)(3) As soon as practicable after a release which requires notice under (b)(1) of this section, such owner or operator shall provide a written follow-up emergency notice (or notices, as more information becomes available) setting forth and updating the information required under paragraph (b)(2) of this section, and including additional information with respect to:

355.40 (b)(3)(i) Actions taken to respond to and contain the release:

355.40 (b)(3)(ii) Any known or anticipated acute or chronic health risks associated with the release:

355.40 (b)(3)(iii) Where appropriate, advice regarding medical attention necessary for exposed individuals:

Should you have any questions, please call _____________________ at __________. Thank you.

Sincerely,
cc:

Certified Mail
Mr. Steven Still
New Hanover County Emergency Management
Local Emergency Planning Committee
230 Government Center Drive
Suite 115
Wilmington, North Carolina 28403

Certified Mail
NCDENR – DAQ
127 Cardinal Drive Extension
Wilmington, NC 28405
Attention:

Certified Mail
New Hanover County Fire Marshall
230 Government Center Drive
Suite 130
Wilmington, North Carolina 28403
Attention:

Certified Mail
NC Division of Emergency Management
4713 Mail Service Center
Raleigh, NC 27699-4713
Attention:
Helpful Internet Links – Hazardous Materials Information

Associations

American Chemistry Council
www.americanchemistry.com

Compressed Gas Association, Inc.
www.cganet.com

International Air Transport Association
http://www.iata.org

Dangerous Goods Advisory Council
http://www.dgac.org

International Association of Fire Chiefs (IAFC)
http://www.iafc.org/

International Association of Fire Fighters (IAFF)
http://www.iaff.org

Intermodal Association of North America (IANA)
http://www.intermodal.org/

National Fire Protection Association (NFPA)
http://www.nfpa.org/

National Safety Council
http://www.nsc.org/

North American Rail Shippers Association
http://www.railshippers.com/

Society for Chemical Hazard Communication
https://www.osha.gov/dcs/p/alliances/schc/schc.html

International Association of Fire Chiefs (IAFC)
http://www.iafc.org/

The Chlorine Institute, Inc.
www.chlorineinstitute.org

U. S. Department of Transportation Resources
http://phmsa.dot.gov/hazmat

HazMat Information and Emergency Response Resources

Academic Info Chemistry
http://www.academicinfo.net/chem.html

Agency for Toxic Substances Disease Registry
http://www.atsdr.cdc.gov/

Chemical Abstracts Service
http://www.cas.org/

Chemical Reactivity Worksheet
http://response.restitution.noaa.gov/chemaid/react.html

Emergency Response Guide

Firehouse
http://www.firehouse.com/

Periodic Table of Elements
http://periodic.lanl.gov/index.shtml

The Continuing Challenge Hazmat Workshop
http://www.hazmat.org/

U.S. Coast Guard CHRIS Manual

U.S. Department of Defense Chemical and Biological Defense
https://www.acq.osd.mil/ncbdp/cbd/
International

ABIQUIM- Associacao Brasileira da Industria Quimica (Brazil)
http://www.abiquim.org.br/

American Association of Poison Control Centers
http://www.aapcc.org/

ANIQ- La Asociacion Nacional de la Industria Quimica (Mexico)
http://webpublico.aniq.org.mx/Paginas/home.asp

Chemical and Allied Industries Association
http://www.caia.co.za/

ChIN's Homepage- China Chemical Industry
http://www.chemindustry.com/chemnames/c/china_chemical_industry.html

IMO- International Maritime Organization
http://www.imo.org/

International Civil Aviation Organization (ICAO)
http://www.icao.int/

IPCA- International Program on Chemical Safety INTOX Project
http://www.icao.int/

TDG- Transport Canada

ICMA- Indian Chemical Manufacturer's Association
http://www.iscma.in/profile.html

JCIA- Japan Chemical Industry Association
http://www.nikkakyo.org/

NZCIC - New Zealand Chemical Industry Council

Plastics and Chemicals Industries Association

Society for Chemical Hazard Communication
http://www.schc.org/

UNEP- United Nations Environment Programme
http://www.unep.org/

SDS Search Web sites
Find a SDS by product name or company name, as well as locate company contacts.

ChemSpider
www.chemspider.com
Search for chemicals online.

MSDSonline
http://www.msdsonline.com/
Search for SDS online.

(PDC) Planning, Design, and Construction
http://www.pdc.cornell.edu/
Links to other SDS sites as well as chemical company phone numbers.

SIRI MSDS Archive
http://www.hazard.com/msds
This site is self-explanatory. Easy to follow instructions guide browser through.

University of Kentucky- Dept of Chemistry
http://www.chem.uky.edu/
Provides information on MSDS' and where to find them.

University of Wisconsin
http://www.uwm.edu/dept/EHSRM
Various types of information, from MSDS' to emergency preparedness to risk management.
Government Agencies

Agency for Toxic Substances & Disease Registry (ATSDR)
http://www.atsdr.cdc.gov/atsdrhome.html

Code of Federal Regulations (CFR)
https://www.govinfo.gov/help/cfr

Department of Transportation Pipeline and Hazardous Materials Safety Administration
https://www.phmsa.dot.gov/

U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration
https://www.phmsa.dot.gov/regulations-fr/rulemaking

EPA Chemical Emergency Preparedness and Prevention Office (CEPPO)
http://www.epa.gov/swercepp/

Federal Aviation Administration (FAA)
http://www.faa.gov/

Federal Emergency Management Agency (FEMA)
http://www.fema.gov/library/

Federal Motor Carrier Administration
http://www.fmcsa.dot.gov/

National Highway Traffic Safety Administration (NHTSA)
https://www.nhtsa.gov/

National Oceanic Atmospheric Administration (NOAA)
http://www.noaa.gov

National Response Center
http://www.nrc.uscg.mil/

National Response Team
http://www.nrt.org/

National Transportation Safety Board (NTSB)
http://www.ntsb.gov/

Occupational Safety and Health Administration (OSHA)
http://www.osha.gov/

U.S. Coast Guard
http://www.uscg.mil

Chemical and Biological Response

Agency for Toxic Substances and Disease Registry
http://www.atsdr.cdc.gov/

Centers for Disease Control
http://www.cdc.gov/

Center for Infectious Disease Research and Policy
http://www1.umn.edu/cidrap/content/bt/bioprep/biofacts/bioterr-overview.html

https://www.hsdl.org/?abstract&did=1236

Morbidity and Mortality Weekly Report
http://www.cdc.gov/mmwr/

U.S. Army Medical Research Institute Chemical Defense (USAMRICD)

U.S. Army Medical Research Institute of Infectious Diseases
http://www.usamriid.army.mil/
General Information

Measure Converter
http://allmeasures.com/

On-Line Conversion
http://www.onlineconversion.com/temperature

Chemical Industry

Synthetic Organic Chemical Manufacturers Association
http://www.socma.com/advocacy/secure.htm

Mobile Device Apps

E-PLAN  WISER  SAFERMobile  ERG

E-Plan  WISER  SAFER Mobile  Hazmat